



**Office of Energy
Projects**

August 2026

Mountain Valley Pipeline, LLC

Docket No. CP26-14-000

Mountain Valley Pipeline Boost Project

Environmental Assessment

Cooperating Agency



**US Army Corps
of Engineers®**

Washington, DC 20426

NEPA Unique ID: EAXX-019-20-000-1767605403

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

OFFICE OF ENERGY PROJECTS

In Reply Refer To:
OEP/DG2E/Gas Branch 3
Mountain Valley Pipeline, LLC
Mountain Valley Pipeline Boost Project
Docket No. CP26-14-000

TO THE INTERESTED PARTY:

The staff of the Federal Energy Regulatory Commission (FERC or Commission) has prepared an environmental assessment (EA) for the Mountain Valley Pipeline Boost Project (Project), proposed by Mountain Valley Pipeline, LLC (Mountain Valley) in the above-referenced docket.¹ Mountain Valley requests authorization to construct, modify, and operate facilities along its existing pipeline system in West Virginia and Virginia to provide about 600,000 dekatherms per day of incremental natural gas service on the existing Mountain Valley Mainline.

Any person wishing to comment on the EA may do so. To ensure consideration of your comments on the proposal prior to making a decision on the Project, it is important that the Commission receive your comments **on or before 5:00 p.m. Eastern Time on September 8, 2026**. Instructions for filing comments are provided on page 3.

FERC is the lead federal agency for authorizing interstate natural gas transmission facilities under the Natural Gas Act of 1938 (NGA) and the lead federal agency for preparation of the EA. The EA assesses the potential environmental effects of the Project in accordance with the requirements of the National Environmental Policy Act (NEPA)² and the Commission's implementing regulations.³ The principal purposes of the EA are to: identify and assess the potential effects on the natural and human environment; describe and evaluate reasonable alternatives; identify and recommend mitigation measures; and facilitate public involvement in the environmental review process. The EA concludes that approval of the Project would not constitute a major federal action significantly affecting the quality of the human environment.

The U.S. Army Corps of Engineers (USACE) Huntington District participated as a cooperating agency in the preparation of the EA. Cooperating agencies have jurisdiction

¹ For tracking purposes under the National Environmental Policy Act, the unique identification number for documents relating to this environmental review is EAXX-019-20-000-1767605403.

² National Environmental Policy Act of 1969, as amended (Public Law [Pub. L.] 91-190. 42 United States Code [U.S.C.] 4321–4347, as amended by Pub. L. 94-52, July 3, 1975; Pub. L. 94-83, August 9, 1975; Pub. L. 97-258, §4(b), September 13, 1982; Pub. L. 118-5, June 3, 2023; Pub. L. 119-21, July 4, 2025).

³ 18 Code of Federal Regulations (CFR) 380.

by law or special expertise with respect to resources potentially affected by the proposal and participate in the NEPA analysis. The USACE has authority under section 404 of the Clean Water Act to regulate the discharge of dredged or fill materials into Waters of the United States, as well as sections 10 and 14 of the Rivers and Harbors Act.⁴ Although the cooperating agency provided input to the conclusions and recommendations presented in the EA, the agency will present its own conclusions and recommendations in its respective Record of Decision for the Project.

The EA addresses the potential environmental effects of the construction and operation of the following Project facilities:

- installation of one additional natural gas turbine and auxiliary facilities to increase capacity by 23,470 horsepower (hp) at the existing Bradshaw Compressor Station (CS) in Wetzel County, West Virginia;
- relocation of existing blowdown silencers and installation of one additional natural gas turbine and auxiliary facilities to increase capacity by 52,500 hp and restaging of two existing natural gas turbines at the existing Harris CS in Braxton County, West Virginia;
- relocation of existing blowdown silencers, installation of two additional natural gas turbines and auxiliary facilities, and upgrades to two existing natural gas turbines to increase capacity by 52,880 hp at the existing Stallworth CS in Fayette County, West Virginia; and
- construction of a new compressor station (Swann CS) with three natural gas turbines totaling 136,900 hp; 0.2 mile-long, 42-inch-diameter dual lay natural gas suction and discharge facilities; a pig launcher and receiver;⁵ a mainline valve; and auxiliary facilities in Montgomery County, Virginia.

The Commission mailed a copy of the *Notice of Availability of the Environmental Assessment for the Mountain Valley Pipeline Boost Project* to federal, state, and local government representatives and agencies; elected officials; Native American tribes; environmental and public interest groups; potentially affected landowners and other interested individuals and groups; and newspapers and libraries in the Project area. The EA is available only in electronic format. It may be viewed and downloaded from FERC's website (www.ferc.gov) on the natural gas environmental documents page (<https://www.ferc.gov/industries-data/natural-gas/environment/environmental->

⁴ The USACE's regulations for permits under section 10 of the Rivers and Harbors Act (33 U.S.C. 403) can be found at 33 CFR 322, while regulations for permits under section 404 of the Clean Water Act are at 33 CFR 323 and processing of permits is at 33 CFR 325.

⁵ A "pig" is a tool that the pipeline company inserts into and pushes through the pipeline for cleaning the pipeline, conducting internal inspections, or other purposes.

[documents](#)). In addition, the EA may be accessed by using the eLibrary link on FERC's website. Click on the eLibrary link (<https://elibrary.ferc.gov/eLibrary/search>), select "General Search" and enter the docket number in the "Docket Number" field, excluding the last three digits (i.e., CP26-14). Be sure you have selected an appropriate date range. For assistance, please contact FERC Online Support at FercOnlineSupport@ferc.gov or toll free at (866) 208-3676, or for TTY, contact (202) 502-8659.

The EA is not a decision document. It presents Commission staff's independent analysis of the environmental issues for the Commission to consider when addressing the merits of all issues in this proceeding. Under section 7(c) of the NGA, the Commission determines whether interstate natural gas transportation facilities are in the public convenience and necessity and, if so, grants a Certificate of Public Convenience and Necessity to construct and operate them. The Commission bases its decisions on both economic issues, including need, and environmental effects.

Your comments should focus on the EA's disclosure and discussion of potential environmental effects, reasonable alternatives, and measures to avoid or lessen environmental effects. The more specific your comments, the more useful they will be. For your convenience, there are three methods you can use to file your comments with the Commission. The Commission encourages electronic filing of comments and has staff available to assist you at (866) 208-3676 or FercOnlineSupport@ferc.gov. Please carefully follow these instructions so that your comments are properly recorded:

- (1) You can file your comments electronically using the [eComment](#) feature on the Commission's website (www.ferc.gov) under the link to [FERC Online](#). This is an easy method for submitting brief, text-only comments on a project;
- (2) You can also file your comments electronically using the [eFiling](#) feature on the Commission's website (www.ferc.gov) under the link to [FERC Online](#). With eFiling, you can provide comments in a variety of formats by attaching them as a file with your submission. New eFiling users must first create an account by clicking on "[eRegister](#)." You must select the type of filing you are making. If you are filing a comment on a particular project, please select "Comment on a Filing"; or
- (3) You can file a paper copy of your comments by mailing them to the Commission. Be sure to reference the Project docket number (CP26-14-000) in your letter. Submissions sent via the U.S. Postal Service must be addressed to: Debbie-Anne A. Reese, Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, DC 20426. Submissions sent via any other carrier must be addressed to: Debbie-Anne A. Reese, Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852.

Filing environmental comments will not give you intervenor status, but you do not need intervenor status to have your comments considered. Only intervenors have the right to seek rehearing or judicial review of the Commission's decision. At this point in this proceeding, the timeframe for filing timely intervention requests has expired. Any person seeking to become a party to the proceeding must file a motion to intervene out-of-time pursuant to Rule 214(b)(3) and (d) of the Commission's Rules of Practice and Procedures (18 Code of Federal Regulations 385.214(b)(3) and (d)) and show good cause why the time limitation should be waived. Motions to intervene are more fully described at <https://www.ferc.gov/how-intervene>.

For public inquiries and assistance with making filings such as interventions, comments, or requests for rehearing, contact the Office of Public Participation at (202) 502-6595 or OPP@ferc.gov. Additional information about the Project is available from the FERC website (www.ferc.gov) using the [eLibrary](#) link. The eLibrary link also provides access to the texts of all formal documents issued by the Commission, such as orders, notices, and rulemakings.

In addition, the Commission offers a free service called eSubscription, which allows you to keep track of all formal issuances and submittals in specific dockets. This can reduce the amount of time you spend researching proceedings by automatically providing you with notification of these filings, document summaries, and direct links to the documents. Go to <https://www.ferc.gov/ferc-online/overview> to register for eSubscription.

Commission Staff Page Limit and Deadline Certifications

I certify that Commission staff has considered the factors mandated by the National Environmental Policy Act (NEPA) and that this environmental document represents a good-faith effort to disclose the most important considerations required by NEPA within the statutory page limit (42 U.S.C. § 4336a(e)) and the statutory deadline (42 U.S.C. § 4336a(g)). This certification reflects staff's expert judgement that the analysis contained within this environmental document is an accurate representation of the potential environmental effects of the proposed action and the analysis is substantially complete. In staff's judgement, any considerations addressed briefly or left unaddressed would not meaningfully inform the assessment of environmental effects.

Gertrude Fernandez Johnson, Director
Division of Gas - Environment and
Engineering

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TECHNICAL ACRONYMS AND ABBREVIATIONS

APE	area of potential effects
ATWS	additional temporary workspace
BCC	Birds of Conservation Concern
bgs	below ground surface
BMP	best management practice
CCAN	Chesapeake Climate Action Network
CFR	Code of Federal Regulations
CH ₄	methane
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
Commission	Federal Energy Regulatory Commission
CR	County Route
CS	Compressor Station
CWA	Clean Water Act
dB	decibel
dBA	decibels on the A-weighted scale
DOT	U.S. Department of Transportation
EA	environmental assessment
EI	Environmental Inspector
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
E&SCP	Erosion and Sediment Control Plan
ESD	emergency shut down
°F	degrees Fahrenheit
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FWS	U.S. Fish and Wildlife Service
g	gravity
GHG	greenhouse gas
gpm	gallons per minute
GWP	global warming potential
HAP	hazardous air pollutant
hp	horsepower
I	interstate highway
IPaC	Information for Planning and Consultation

L _{dn}	day-night average sound level
L _{eq}	equivalent sound level
MLV	mainline valve
MMI	Modified Mercalli Intensity
Mountain Valley	Mountain Valley Pipeline, LLC
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NGA	Natural Gas Act of 1938
NHPA	National Historic Preservation Act
NO _x	nitrogen oxides
NO ₂	nitrogen dioxide
N ₂ O	nitrous oxide
Notice of Application	<i>Notice of Application and Establishing Intervention Deadline</i>
Notice of Scoping	<i>Notice of Scoping Period Requesting Comments on Environmental Issues for the Proposed MVP Boost Project</i>
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSA	noise-sensitive area
O ₃	ozone
OEP	Office of Energy Projects
PEM	palustrine emergent
PGA	peak ground acceleration
PHMSA	Pipeline and Hazardous Materials Safety Administration
PJD	Preliminary Jurisdictional Determination
Plan	<i>Upland Erosion Control, Revegetation, and Maintenance Plan</i>
PM _{2.5}	particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to 10 micrometers
POWHR	Protect Our Water, Heritage, Rights
Procedures	<i>Wetland and Waterbody Construction and Mitigation Procedures</i>
Project	Mountain Valley Pipeline Boost Project
Pub. L.	Public Law
RHD	Rural Historic District
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Office
SIL	Significant Impact Level
SO ₂	sulfur dioxide

SPCC	Spill Prevention, Control, and Countermeasure
SR	State Route
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USDA	U.S. Department of Agriculture
USGCRP	U.S. Global Change Research Program
USGS	U.S. Geological Survey
VDCR	Virginia Department of Conservation and Recreation
VDEQ	Virginia Department of Environmental Quality
VDH-ODW	Virginia Department of Health Office of Drinking Water
VDWR	Virginia Department of Wildlife Resources
VOC	volatile organic compound
WVDEP	West Virginia Department of Environmental Protection
WVDNR	West Virginia Department of Natural Resources
WVGES	West Virginia Geological and Economic Survey
WVWA	Western Virginia Water Authority

SECTION A – PROPOSED ACTION

A.1. Introduction

Federal Energy Regulatory Commission (Commission or FERC) staff prepared this environmental assessment (EA) to analyze the environmental effects associated with Mountain Valley Pipeline, LLC's (Mountain Valley) proposed Mountain Valley Pipeline Boost Project (Project). On October 23, 2025, Mountain Valley filed an application with the Commission pursuant to section 7(c) of the Natural Gas Act of 1938 (NGA),¹ and Part 157 of the Commission's regulations,² seeking authorization to construct and operate certain natural gas facilities in West Virginia and Virginia, as described in section A.4. U.S. Geological Survey (USGS) topographic maps depicting the Project along with Project plans on aerial photography basemaps are provided in appendix A.

A.2. Project Purpose and Need

Mountain Valley states the purpose of the Project is to transport additional volumes of natural gas from interconnection points with Equitrans, L.P. at Mobley Run and EQM Gathering Opco, LLC at Great Hammerhead to delivery points on the Mountain Valley Mainline and Mountain Valley Southgate systems. The Project would provide about 600,000 dekatherms per day of incremental firm natural gas transportation service for the project shippers to meet growing supply and resiliency needs via existing interconnections on the Mountain Valley Mainline.³

A.3. Scope of the EA

Commission staff reviewed the application, supplemental filings, and comments received to establish the scope of this EA. As presented in table A.3-1, we⁴ first considered whether each resource is present in the area of the proposed action and alternatives. If the resource is present, we evaluated whether further detailed analysis is warranted due to potential effects; if so, that resource is carried forward for discussion in the EA. If the resource is present but would not be affected to a degree that detailed analysis is required, that resource is not carried forward and a rationale is provided. If the resource is not present or would not be affected by the proposed action, it is not carried forward for further discussion.

¹ 15 United States Code (U.S.C.) 717f(b), (c).

² Title 18 Code of Federal Regulations (CFR) 157 (2025).

³ Mountain Valley October 23, 2025 Application, Resource Report 1 at 1-1, FERC Accession No. 20251023-5112.

⁴ "We," "us," and "our" refer to the environmental and engineering staff of the Office of Energy Projects.

TABLE A.3-1

Summary of Resource Areas Analyzed		
Resource Area	Presence of Resource	Determination
Mineral Resources	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Geologic Hazards	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Soils	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Groundwater	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Surface Water	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Wetlands	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Fisheries	☐ Present ☒ Not Present	☐ Carried Forward ☒ Not Carried Forward Rationale if not carried forward: No suitable habitat is within the Project area for fisheries. We identified no direct or indirect effects on perennial or intermittent waterbodies.
Vegetation	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Wildlife	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Land Use	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Recreation	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Visual Resources	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Cultural Resources	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Socioeconomics	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Air Quality - Construction	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Air Quality - Operation	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Noise - Construction	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Noise - Operation	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:
Reliability and Safety	☒ Present ☐ Not Present	☒ Carried Forward ☐ Not Carried Forward Rationale if not carried forward:

The topics identified in table A.3-1 as carried forward for further discussion are addressed in section B of this EA. Section B describes the affected environment as it currently exists, discusses the environmental consequences of the proposed Project, identifies measures proposed by Mountain Valley to reduce effects, and presents our additional recommended mitigation measures that are summarized in section D. The EA also assesses alternatives to the proposed action in section C. We recommend the Commission incorporate the measures listed in section D as mandatory environmental conditions of any Certificate it may issue to Mountain Valley for the Project.

The Commission is a federal regulatory agency and conducts a complete independent review of project proposals, including an environmental review of the proposed facilities. As the lead federal agency for the Project, we are required to comply with section 7 of the Endangered Species Act (ESA) and section 106 of the National Historic Preservation Act (NHPA). These statutes have been considered in the preparation of this EA. In addition to FERC, other federal, state, and local agencies may use this EA in approving or issuing any permits necessary for all or part of the proposed Project. Table B1 in appendix B lists the major federal and state permits, approvals, and consultations for Project activities and provides their current status. Mountain Valley would be responsible for obtaining all permits and approvals required to construct and operate the Project, regardless of whether they appear in this table.

A.4. Proposed Actions

Mountain Valley proposes to construct, modify, and operate facilities along its existing pipeline system in West Virginia and Virginia. The Project would consist of:⁵

- installing one additional natural gas turbine and auxiliary facilities to increase capacity by 23,470 horsepower (hp) at the existing Bradshaw Compressor Station (CS) in Wetzel County, West Virginia;
- relocating existing blowdown silencers and installing one additional natural gas turbine and auxiliary facilities to increase capacity by 52,500 hp and restaging of two existing natural gas turbines at the existing Harris CS in Braxton County, West Virginia;
- relocating existing blowdown silencers, installing two additional natural gas turbines and auxiliary facilities, and upgrading two existing natural gas turbines to increase capacity by 52,880 hp at the existing Stallworth CS in Fayette County, West Virginia; and
- constructing a new compressor station (Swann CS) with three natural gas turbines totaling 136,900 hp; 0.2 mile-long, 42-inch-diameter dual lay natural gas suction

⁵ Mountain Valley October 23, 2025 Application, Resource Report 1, table 1.2-1 at 1-4, FERC Accession No. 20251023-5112.

and discharge facilities; a pig launcher and receiver;⁶ a mainline valve (MLV); and auxiliary facilities in Montgomery County, Virginia.

An overview map of the Project facilities is shown in figure 1, and detailed maps are provided in appendix A.

⁶ A “pig” is a tool that the pipeline company inserts into and pushes through the pipeline for cleaning the pipeline, conducting internal inspections, or other purposes.

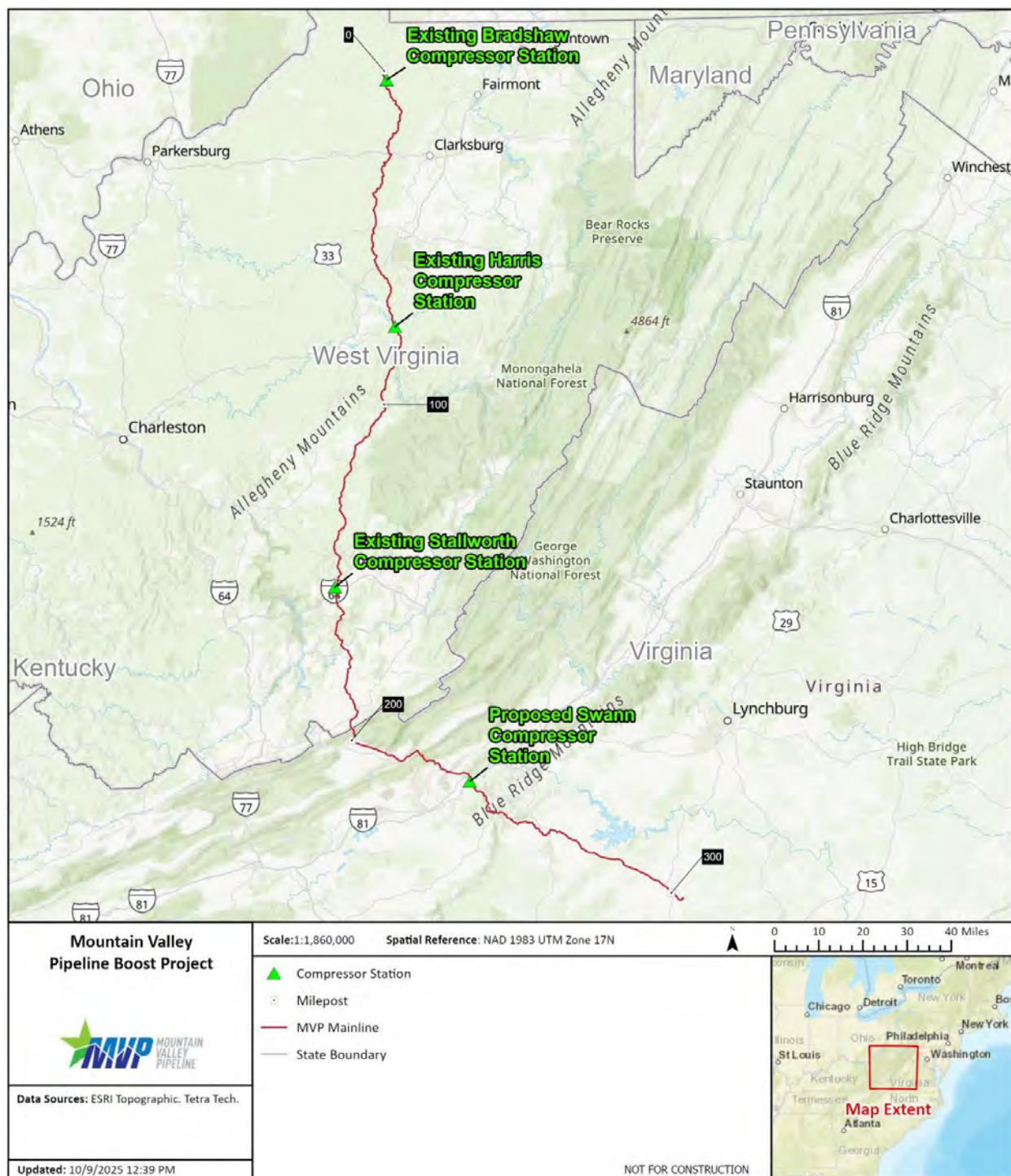


Figure 1. Project Overview Map

A.5. Land Requirements

The Project would disturb about 65.3 acres of land, as shown in table A.5-1. Modifications at the Bradshaw CS would be entirely within the existing station site, modifications at the Harris CS would require expanding the existing station by less than 0.1 acre, and modifications at the Stallworth CS would require expanding the existing station by about 0.5 acre.

TABLE A.5-1		
Land Requirements for the Project		
Project Component	Construction Area (acres) ^a	Operation Area (acres)
Existing Bradshaw CS Modifications	6.3	6.3
Existing Harris CS Modifications	5.6	5.6
Existing Stallworth CS Modifications	6.4	6.4
Proposed Swann CS ^b	25.1 ^c	23.8
Laydown Yards	21.6	0.0
Access Road Modifications ^d	0.3	0.3
PROJECT TOTAL ^e	65.3	42.4
Source: Mountain Valley April 20, 2026 response to EIR 2 at 1, FERC Accession No. 20260420-5234; Mountain Valley June 26, 2026 Supplement, revised tables 1.3-1 and 1.3-2, FERC Accession No. 20260626-5070.		
^a Construction acreages also include the land for operation.		
^b This includes MLV, pig launcher and receiver, and suction and discharge facilities.		
^c Includes 1.0 acre of additional temporary workspace (ATWS).		
^d This represents the portion of the Swann CS access road not included within the compressor station.		
^e Due to rounding, totals may not equal the sum of addends.		

Mountain Valley would use existing roads for access during construction and operation. No modifications would be made to existing roads except for at the proposed Swann CS site where the existing road would be widened to 25 feet, graded, and stabilized. Mountain Valley would also adjust the alignment of the road at the entrance to the proposed site.

During construction, Mountain Valley would use the following four temporary laydown yards, two of which (MVP-CY-002 and MVP-CY-002A) are contiguous:

- Bradshaw CS Laydown Yard in Wetzel County, West Virginia;
- MVP-CY-002 and MVP-CY-002A in Braxton County, West Virginia, for the Harris CS; and
- Swann CS Laydown Yard in Montgomery County, Virginia.

These laydown yards were previously used as temporary workspace during construction of the Mountain Valley Mainline.

A.6. Construction Procedures and Schedule

Mountain Valley would design, construct, test, operate, and maintain Project facilities in accordance with U.S. Department of Transportation (DOT) regulations in 49 Code of Federal Regulations (CFR) 192, Transportation of Natural and Other Gas by Pipeline: Minimum Federal

Safety Standards; FERC's Siting and Maintenance Requirements in 18 CFR 380.15; and other applicable federal and state regulations.⁷

Mountain Valley has committed to following FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan) and *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures).⁸ Our Plan and Procedures are baseline construction and mitigation measures developed to minimize the effects of construction on upland areas, wetlands, and waterbodies. Mountain Valley proposes modifications to our Procedures as summarized in table B2 in appendix B. We have reviewed these alternative measures and conclude they are sufficiently justified. The modified FERC Procedures are hereafter referred to as Mountain Valley's Procedures. In addition to our Plan and Mountain Valley's Procedures, Mountain Valley developed Project-specific plans, including a Blasting Plan for the Project; a Spill Prevention, Control, and Countermeasure (SPCC) Plan and Unanticipated Discovery of Contamination Plan for Construction Activities for each state; Migratory Bird Conservation Plan; a Noxious Weed and Invasive Species Control Plan for the Swann CS; and a Traffic and Transportation Management Plan. We have reviewed these plans and find them acceptable. Mountain Valley would file an Erosion and Sediment Control Plan (E&SCP), Unanticipated Karst Discoveries Plan, and Stormwater Management Plan prior to construction. We will review these plans when they are filed.

Mountain Valley would typically conduct construction activities 6 days per week (typically Monday through Saturday) from 7:00 a.m. to 7:00 p.m. When sunset occurs later in the evening, construction activities may continue after 7:00 p.m. but would typically be limited to daylight hours, with some exceptions. Activities that require around-the-clock operations include, but are not limited to, hydrostatic testing⁹ and subsequent cleaning and drying of the pipe, as well as tie-in welds. Work may occur during nighttime hours or on Sundays or holidays if 5 or fewer days were worked the previous week and/or due to extenuating circumstances, such as safety and weather.

Subject to receiving necessary permits and authorizations, Mountain Valley anticipates beginning vegetation clearing at the Swann CS site in December 2026 with construction starting in January 2027 and continuing to June 2028. Suction and discharge piping construction would begin in July 2027 and continue to October 2027, with restoration to be completed by September 2028. Modifications at the existing compressor stations would begin in July 2027 at the Bradshaw and Stallworth CSs and August 2027 at the Harris CS. Construction at the compressor stations would end in March 2028 at the Bradshaw CS, June 2028 at the Stallworth CS, and

⁷ A detailed description of construction methods can be found in Mountain Valley's October 23, 2025 Application, Resource Report 1 at 1-16 to 1-22, FERC Accession No. 20251023-5112.

⁸ FERC's Plan and Procedures can be accessed online at <https://www.ferc.gov/industries-data/natural-gas/environmental-overview/environmental-guidelines>.

⁹ The suction and discharge facilities at the Swann CS would be capped with test manifolds, filled with water, and pressurized to a minimum of 1.5 times the designed maximum allowable operating pressure for a minimum of 8 hours in accordance with DOT requirements before being placed in service. Mountain Valley would repair leaks detected and retest, if required.

June 2028 at the Harris CS, with completion of restoration by July 2028.¹⁰ Mountain Valley is targeting a full in-service date of June 2028, contingent on Commission staff's determination that restoration is proceeding satisfactorily.¹¹

Mountain Valley would designate at least one Environmental Inspector (EI) per state to oversee Project activities and verify compliance with the environmental conditions of our Certificate, other federal and state permits, and landowner requirements, and to order corrective action. The EI's duties are further described in section II.B, *Responsibilities of Environmental Inspectors*, of our Plan. We would also conduct field inspections and maintain oversight throughout construction and restoration to ensure compliance with the Commission's Order.

A.7. Non-jurisdictional Facilities

Under section 7 of the NGA, and as part of the decision to approve facilities under its jurisdiction, the Commission considers all factors bearing on the public interest. Occasionally, proposed projects have associated facilities that do not come under the jurisdiction of the Commission. These "non-jurisdictional" facilities may be integral to the need for the proposed facilities, such as a gas-fueled power plant at the end of a jurisdictional pipeline, or they may be minor, non-integral components of the facilities, such as utility lines.

At the Swann CS, a non-jurisdictional overhead power line would provide electric service for construction and commissioning and serve as a backup power source to the station during regular operations. The power line would connect to an existing electrical utility on the north side of U.S. Route 460/11 that is operated by Appalachian Power, a unit of American Electric Power. American Electric Power would design and install the power line and be responsible for obtaining any necessary highway and railway crossing permits, as well as any easements. Mountain Valley estimates the non-jurisdictional power line would require a right-of-way width of about 40 feet and result in about 1.5 acres of ground disturbance outside of the Swann CS.¹²

A.8. Public Review and Comment

On November 5, 2025, the Commission issued a *Notice of Application and Establishing Intervention Deadline* (Notice of Application) announcing that Mountain Valley had filed an application with FERC, which established a 21-day period for the submission of comments, concerns, and issues related to the proposed Project, and for motions to intervene.

On November 19, 2025, the Commission issued a *Notice of Scoping Period Requesting Comments on Environmental Issues for the Proposed MVP Boost Project* (Notice of Scoping). The notice was sent to affected landowners; federal, state, and local government agencies;

¹⁰ Mountain Valley July 6, 2026 response to EIR 3 question 3 under General, FERC Accession No. 20260706-5190.

¹¹ Mountain Valley October 23, 2025 Application, Resource Report 1 at 1-1, FERC Accession No. 20251023-5112.

¹² Mountain Valley April 20, 2026 response to EIR 2 at 3, FERC Accession No. 20260420-5234.

elected officials; Native American tribes; environmental and public interest groups; other interested parties; and local libraries and newspapers.

In response to the Notice of Application and Notice of Scoping, the Commission received comments from the U.S. Fish and Wildlife Service (FWS) West Virginia Field Office; Virginia Department of Historic Resources (Virginia State Historic Preservation Office [SHPO]), Virginia Department of Environmental Quality (VDEQ); Virginia Department of Conservation and Recreation (VDCR) Division of Natural Heritage; 7 state elected officials; Montgomery County, Virginia; Craig County, Virginia; 1 affected landowner;¹³ 2 companies, and about 84 individuals. The following organizations also provided comments: Appalachian Voices; Protect Our Water, Heritage, Rights (POWHR); Southern Alliance for Clean Energy; Chesapeake Climate Action Network (CCAN); Preserve Bent Mountain; Preserve Giles County; Sierra Club; Preserve Montgomery County Virginia; Danville Chamber of Commerce; Salem-Roanoke Chamber of Commerce; Roanoke Regional Chamber of Commerce; Virginia Chamber of Commerce; Our Children's Trust; West Virginia Rivers Coalition; Natural Gas Coalition of Virginia, and Carolinas Natural Gas Coalition. Some commenters filed more than one comment. In all, we received about 154 comments. All substantive comments are addressed in the relevant resource sections of the EA.

The FWS West Virginia Field Office asked for a definition of the proposed auxiliary facilities and whether tree clearing would occur at the existing compressor stations. The Virginia SHPO provided concurrence regarding cultural resources, the VDEQ provided information on its document submission process, and the VDCR provided information on natural heritage resources.

Individuals, organizations, several counties, and one state elected official expressed concerns regarding effects of the Project on water resources, wetlands, aquatic resources, wildlife, cultural resources, socioeconomic, environmental justice communities, property values, visual resources, air quality, noise, health, and safety. Some requested analysis of energy alternatives and alternative sites for the Swann CS.

We received comments about public outreach, including lack of scoping meetings; that an environmental impact statement (EIS) should be prepared instead of an EA; and that intervenor and scoping comment deadlines should be extended. The Commission provided multiple comment opportunities for the Project, as detailed above, including a 21-day application comment period, a 30-day scoping comment period, and a 30-day EA comment period that began with issuance of this EA.¹⁴ Considering the 154 written comments received by the Commission in this proceeding, staff used its discretion in concluding that additional scoping

¹³ Affected landowners include owners of property that would be crossed or used by the Project, is adjacent to the Project, contains a residence within 50 feet of the proposed construction work area, or is within 0.5 mile of proposed compressor stations or their enclosures (section 157.6(d)(2) of the Commission's regulations).

¹⁴ Although Commission staff did not hold scoping sessions, we note that in October 2025, Mountain Valley held two meetings for landowners close to the Swann CS site to provide attendees an opportunity to learn about the Project, ask questions, and provide feedback on the proposed Project. In addition, in December 2025, Mountain Valley held an open house near each of the three existing compressor stations and near the proposed Swann CS to provide information about the Project and solicit stakeholder feedback.

sessions and extended comment or intervention periods were not necessary. We believe the written record reflects ample and appropriate opportunity for stakeholder comments.

Regarding requests for an EIS, we note that an EA is a concise public document that serves to provide sufficient evidence and analysis for determining a finding of no significant impact. The Commission's regulations at 18 CFR 380.6(b) state that "If the Commission believes that a proposed action...may not be a major federal action significantly affecting the quality of the human environment, an environmental assessment, rather than an environmental impact statement, will be prepared first. Depending on the outcome of the environmental assessment, an environmental impact statement may or may not be prepared." In preparing this EA, we are fulfilling our obligation under the National Environmental Policy Act (NEPA) to consider and disclose the environmental effects of the Project. Based on our analysis and considering that the Project would involve a new compressor station adjacent to the existing Mountain Valley Mainline on previously disturbed land, as well as modifications to existing facilities, we conclude in section D that the Project effects would not be significant and, thus, an EA is warranted.

A number of commenters voiced concerns regarding segmentation because the Swann CS was not included as part of the NEPA review for the Mountain Valley Mainline system.¹⁵ Sierra Club and POWHR state that the Mountain Valley Mainline, Mountain Valley Southgate Amendment, and this Project are interrelated parts of a larger gas transportation project, and the Commission should not consider their effects in isolation. An agency impermissibly "segments" NEPA review when it divides connected, cumulative, or similar federal actions into separate projects and thereby fails to address the true scope and effect of the activities that should be under consideration.¹⁶ "Projects," for the purposes of NEPA, are described as "proposed actions," or proposals in which action is imminent.¹⁷ Based on the factors discussed below, we conclude that this proceeding involves no impermissible NEPA segmentation. The EIS for the Mountain Valley Mainline project was issued nearly 9 years ago, and the Mountain Valley Mainline project had independent utility from the Swann CS because it served a significant purpose without the Swann CS being built. With respect to the Southgate Amendment project, the Project comprises discrete facilities in separate locations (the closest Project facility is more than 65 pipeline miles from the planned Mountain Valley Southgate interconnection with the Mountain Valley Mainline), and the design of the Project is not affected by the Southgate Amendment project. Further, Mountain Valley held separate open seasons for the three projects years apart, and the projects are supported by separate precedent agreements with different negotiated and recourse rates. The precedent agreements underpinning the Project provide for transportation of additional firm volumes of natural gas to existing delivery points on the Mountain Valley Mainline. The Mountain Valley Mainline is operating at full use, and the Project is designed to optimize existing system design and hydraulics to provide additional

¹⁵ Mountain Valley Project and Equitrans Expansion Project Environmental Impact Statement issued by FERC June 2017, Docket Nos.: CP16-10-000 and CP16-13-000.

¹⁶ *Del. Riverkeeper Network v. FERC*, 753 F.3d 1304, 1313 (D.C. Cir. 2014).

¹⁷ *Wilderness Workshop v. U.S. Bureau of Land Mgmt.*, 531 F.3d 1220, 1229 (10th Cir. 2008) (quoting *O'Reilly v. U.S. Army Corps of Eng'rs*, 477 F.3d 225, 236 (5th Cir. 2007)).

capacity while minimizing effects on landowners and communities. The Swann CS serves a different purpose than the Mountain Valley Mainline and the Southgate Amendment.

Several commenters raised issues that are outside of the scope of this environmental analysis, including determination of need for the Project, Mountain Valley's previous environmental practices, energy policy, and the Project's contribution to delaying the development of renewable energy sources. Regarding comments on the need for the Project, the Commission has developed a Certificate Policy Statement¹⁸ that established criteria for determining whether there is a need for a proposed project and whether a proposed project would serve the public interest. The Commission decision, in its Order, would determine the need for the Project.

¹⁸ See *Certification of New Interstate Nat. Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *clarified*, 90 FERC ¶ 61,128, *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

SECTION B – ENVIRONMENTAL ANALYSIS

The environmental consequences of the Project would vary in duration. We classify effect durations into four levels: temporary, short term, long term, and permanent. Temporary effects would generally occur during construction with the resource restored almost immediately afterward. Short-term effects would continue for 2 to 5 years following construction. Long-term effects would require more than 5 years for a resource to recover. A permanent effect would occur from any activity that modifies a resource to the extent that restoration would not be completed within the lifetime of the Project. When determining the significance of an effect, we consider the duration of the effect as well as the geographic, biological, and/or social context in which the effects would occur, and the intensity (e.g., severity) of the effect.

The analysis contained in this EA is based on Mountain Valley’s application and supplemental filings and our experience with the construction and operation of natural gas infrastructure. However, if a project is approved and proceeds to the construction phase, it is not uncommon for a project proponent to seek minor realignments or changes in workspace configurations once construction begins. Any project modifications or “variances” would be subject to review and approval by the Commission and any other applicable permitting/authorizing agency.

B.1. Environmental Trends and Planned Activities

To contextualize the Project’s effects, we describe the existing environment in the Project area, how the environment has changed over time, and other reasonably foreseeable projects in the area. The Project’s proposed actions would be in four counties: Wetzel, Braxton, and Fayette, Counties in West Virginia, and Montgomery County in Virginia.

Wetzel, Braxton, and Fayette Counties in West Virginia were formed between 1831 and 1846. Of the three counties, Fayette County is the most populous, with a population of 40,488 during the 2020 census, whereas Wetzel County had a population of 14,442 and Braxton County recorded a population of 12,447 (U.S. Census Bureau, 2020a, 2020b, 2020c). From 2010 to 2024, the population in Wetzel, Braxton, and Fayette Counties, as well as the state overall, decreased. All three counties are within the Appalachian Plateaus physiographic province (National Park Service, 2024). Extensive coal beds throughout this region have provided a source of economic revenue for the area for over 150 years. Coal is still being mined in many counties of West Virginia, including Wetzel and Fayette Counties (West Virginia Office of Miners’ Health, Safety and Training, 2025).

Following the first European explorers to the area in the 17th century, most inhabitants of West Virginia were subsistence farmers (Rice and Brown, 2025). As industry in the United States boomed during the 1800s, West Virginia became an important source of oil, leading to the development of transportation in the region. The state’s economy historically relied on the extraction of natural resources, including coal, timber, and natural gas, although tourism and outdoor recreation are becoming increasing drivers of the economy in the state, particularly in Fayette County, which is home to New River Gorge National Park and Preserve. The counties have warm summers, with summer months averaging between 61 degrees Fahrenheit (°F) and 72°F, and cool winter months averaging between 32°F and 46°F (National Centers for

Environmental Information, 2026). Precipitation occurs year-round. West Virginia's Division of Air Quality reports that most counties (including Wetzel, Braxton, and Fayette Counties) are meeting federal air quality standards, and hazardous air pollutant emissions have decreased since 2011 (West Virginia Department of Environmental Protection [WVDEP] Division of Air Quality, n.d.). Water quality in streams is generally noted to be poorer in the ecoregion that contains Wetzel County than in the ecoregion that contains Braxton and Fayette Counties.

Montgomery County, Virginia, was formed in 1777. The county is within the Valley and Ridge physiographic province (National Park Service, 2018). Coal, iron, limestone, and zinc found in this province provide sources of industry to the area through mining and manufacturing of the mined resources. The population of Montgomery County was 99,721 during the 2020 census (U.S. Census Bureau, 2020d). The population increased in Montgomery County from 2010 to 2020 and decreased slightly from 2020 to 2024. Prior to the Civil War, Virginia's economy was rich with industry and manufacturing; however, agriculture became the dominant sector of the economy following the war (Witkoski, 2022). Montgomery County typically has warm summers, with summer months averaging between 61°F and 71°F, and cool winter months averaging between 35°F and 46°F (National Centers for Environmental Information, 2026). Precipitation is slightly higher in warmer months (averaging 2.5 to 4.7 inches) as compared to the cooler months (1.9 to 3.9 inches). The VDEQ reports that the region containing Montgomery County is meeting primary standards for air quality metrics (VDEQ, 2025a). The county contains two river basins, both of which are noted as being impaired for recreation primarily due to pollutants from agriculture and livestock (grazing or feeding operations) (VDEQ, 2026).

Several reasonably foreseeable planned activities were identified that may influence the environmental baseline in which the Project would be constructed. In the counties that would be affected by the Project, the Mountain Valley Pipeline/Equitrans Expansion Project included construction of the Mountain Valley Mainline (44.3 miles); construction of the Bradshaw, Harris, and Stallworth CSs; and installation of another less than 0.1 mile of pipeline (FERC, 2017a). The planned Project would overlap geographically with the Mountain Valley Pipeline/Equitrans Expansion Project including connecting the Swann CS to the Mountain Valley Mainline, modifying the existing compressor stations, and using some of the same laydown yards. The Mountain Valley Mainline is complete and is in operation. Operational air quality effects are subject to federal and state air regulations and state air quality permit requirements, and minimal effects on baseline conditions are anticipated. The contribution of the Project to baseline air quality is addressed in section B.9 of this EA.

Other planned projects identified in Wetzel County and Montgomery County include a pipeline (Longwell to Fracslap Pipeline, 9.1 miles north of the Bradshaw CS), a series of longwall mine panel protection projects (Lines 1360, 1983 and 1570 Longwall Mining Panel Protection Projects, 1.0 mile south of the Bradshaw CS), an interstate widening project (Virginia Department of Transportation Interstate 81 Widening, 1 mile north of the Swann CS), and ongoing work at a mine (Harrison County Mine, a subsurface coal mine adjacent to the Bradshaw CS). Mains accessing areas to be mined beginning in November 2027 will extend beneath the station at a depth of about 1,230 feet below ground surface (bgs). The aboveground entrance to the mine is approximately 8 miles southeast of the Bradshaw CS. Work at the Harrison County Mine is ongoing, and construction schedules were not available for the other projects mentioned above. If construction for any of the new projects overlaps with the Project,

area residents may notice a temporary increase in construction equipment and ground disturbance, along with associated noise and dust, in the area.

Surface water effects occur at waterbody crossings where in-water construction is conducted and may extend some distance downstream for a conservative consideration of turbidity. Watersheds contribute to groundwater recharge, have defined boundaries of surface water flow, and contribute to wetland hydrology. During construction, projects within the same sub-watersheds as the Project potentially would affect water resources, biological resources through vegetation clearing and habitat disturbance, and wetlands.

The specific environmental resources and land uses affected by the Project activities are discussed throughout section B.

B.2. Geology

B.2.1 Physiographic Settings and Geologic Conditions

The Bradshaw, Harris, and Stallworth CSs are within the Appalachian Plateau physiographic province, and the Swann CS site is in the Valley and Ridge physiographic province (USGS, 2025a). The Appalachian Plateau consists mainly of steep-sloped ridges and level valleys considered to be deeply dissected, rugged terrain. Underlying bedrock generally consists of sandstone, siltstone, shale, coal, and some limestone (West Virginia Geological and Economic Survey [WVGES], 2025a; Trapp and Horn, 1997). The Valley and Ridge province is characterized by parallel mountain ridges and valleys trending in a northeast direction. Resistant sandstone or conglomerate forms the upper portions of the ridges. The lower portions of the ridges and the valleys are underlain by shale and carbonates (limestone and dolomite) (Trapp and Horn, 1997; WVGES, 2025a). Elevations in the Project area range from about 1,320 feet at the Swann CS site to about 2,790 feet at the Stallworth CS.

Mountain Valley completed site-specific geotechnical evaluations, consisting of test pits and borings, prior to construction of the Bradshaw, Harris, and Stallworth CSs in 2016 and 2017 and at the proposed Swann CS site in 2025. At the Bradshaw CS, unconsolidated material (overburden) was underlain by bedrock composed of alternating claystone, siltstone, sandstone, and shale at depths ranging from 5.5 to 8.5 feet bgs. At the Harris CS, overburden was underlain by sandstone and claystone bedrock at depths ranging from 2.5 to about 35 feet bgs. At the Stallworth CS, overburden was underlain by claystone and sandstone bedrock at depths ranging from 4.5 to about 33 feet bgs. At the Swann CS site, overburden was underlain by argillite and phyllitic mudstone at depths ranging from about 2 to 29 feet bgs.¹⁹

B.2.2 Mineral Resources

Based on review of topographic maps, federal and state database information (USGS, 2025b; Virginia Department of Energy, 2025a; WVGES, 2025a), and field studies (Draper Aden Associates, 2015a), no active or historic surface mines or quarries are within 0.25 mile of the

¹⁹ Mountain Valley October 23, 2025 Application, Resource Report 6 at 6-4 to 6-5, FERC Accession No. 20251023-5112.

Bradshaw, Harris, or Stallworth CSs. The Swann CS site was a surface mine for shale and clay supporting brick manufacturing from about the 1950s through 2015 when the property was sold and the brick company ceased operations (Schnabel Engineering, 2019). No other surface mines were identified within 0.25 mile of the Swann CS.

A subsurface coal mine, the Harrison County Mine, is adjacent to the Bradshaw CS. The Harrison County Mine is a large-scale longwall coal mining operation in the Pittsburgh Coal Seam, which is about 1,230 feet below the Bradshaw CS. Longwall mining of the panels adjacent to the Bradshaw CS is scheduled to begin in November 2027 (John T. Boyd Company, 2024), and mains²⁰ accessing these panels would be installed beneath the station. This mine is discussed further in section B.2.3. No other surface or subsurface mines are within 0.25 mile of the Project.

Two abandoned/plugged oil or natural gas wells are mapped near the Bradshaw CS Laydown Yard. No other oil or natural gas wells were identified within 0.25 mile of the Project (WVGES, 2025b; WVDEP, 2025a; Virginia Department of Energy, 2025b).

Given the depth of the coal mining beneath the Bradshaw CS and the distance from Project workspace to other areas of active resource extraction, we conclude that the Project would not significantly affect availability of, or access to, mineral resources.

B.2.3 Geologic Hazards

Geologic hazards are natural, physical conditions that can result in damage to land and structures or injury to people. Such hazards may include seismic-related risks such as earthquakes, surface faulting, and soil liquefaction; landslides; and ground subsidence, including from karst terrain and subsurface mining. Commenters expressed concerns about safety related to seismicity and slope instability, which are addressed below. One commenter requested demonstration that the increased stress from a higher-volume system would not exacerbate existing geohazard risks, such as landslides and ground subsidence. The increased volume of gas in the Mountain Valley Mainline would not affect the risk of geohazards because, as described in section B.11, the Project would not increase the maximum allowable operating pressure, which is the highest pressure at which a pipeline system is authorized to safely operate, determined based on design and safety factors. Natural gas pipelines are further required by the DOT Pipeline and Hazardous Materials Safety Administration (PHMSA) to be designed to withstand external loads including those that may be imposed by geological forces (49 CFR 192.103).

Seismicity and Soil Liquefaction

Earthquake severity can be expressed in terms of intensity and magnitude. Intensity is based on observed effects of ground shaking, while magnitude describes seismic energy released at the earthquake source. Additionally, peak horizontal ground acceleration, expressed in terms of acceleration as a percent of gravity (g), is a measure of the effect of an earthquake at a certain distance from the source and based on geological conditions. USGS National Seismic Hazard Probability Mapping shows that for a 50-year period, there is a 2 percent probability of an

²⁰ Underground tunnels used for transportation, ventilation, and utility conduit installation within the coal mine.

earthquake with a peak ground acceleration (PGA) of 8 percent g at the Bradshaw CS, 11 percent g at the Harris CS, 18 percent g at the Stallworth CS, and 17 percent g at the Swann CS (USGS, 2023a). For reference, a PGA of 10 percent g (0.1g) is generally considered the minimum threshold for damage to older structures or structures not constructed to resist earthquakes.

The intensity of an earthquake is described using the Modified Mercalli Intensity (MMI) scale. In general, modern electric arc welded steel pipelines have not sustained damage during seismic events except due to permanent ground deformation or traveling ground-wave propagation greater than or equal to MMI VIII (O'Rourke and Palmer, 1996). Based on the USGS National Seismic Hazard Probability Mapping (USGS, 2023b) and site-specific peak ground acceleration values converted to MMI using standard USGS conversion tables (USGS, 2025c), the MMI with 2 percent probability of exceedance in 50 years is V-VI at the Bradshaw and Harris CSs, and VI-VII at the Stallworth and Swann CSs. The Project does not cross known or inferred Quaternary-age faults (USGS, 2020; Draper Aden Associates, 2015b).

Soil liquefaction is a phenomenon associated with seismic activity in which saturated, non-cohesive soils temporarily lose their strength and liquefy (i.e., behave like a viscous liquid) when subjected to forces such as intense and prolonged ground shaking (in general, a PGA of 10 percent g or greater). All three of these conditions must be present for soil liquefaction to occur. Site-specific geotechnical investigations indicate a low potential for soil liquefaction and lateral spreading.

Mountain Valley would design and construct Project facilities to meet the requirements of DOT 49 CFR 192 to withstand reasonably anticipated outside forces, including seismic ground shaking. Buildings and foundations that house or support regulated pipeline facilities would be designed in accordance with American Society of Civil Engineers (ASCE) 7 (*Minimum Design Loads and Associated Criteria for Buildings and Other Structures*), with structural concrete and steel designed in accordance with American Concrete Institute (ACI) 318 and American Institute of Steel Construction (AISC) 360, respectively, to accommodate site-specific seismic conditions. Based on the above assessment, the risk of a significant earthquake or ground faulting damaging Project facilities is low, as is the potential for secondary seismic hazards such as soil liquefaction.

Landslides and Slope Stability

Natural causes of landslides include slope destabilization resulting from adverse bedrock conditions, steep incline, water content and flow, precipitation, freeze/thaw cycles, and soil characteristics. Anthropogenic causes or contributing factors include ground disturbance on or at the toe of steep slopes, and alteration of surface or subsurface drainage patterns. Construction-related landslide triggers can additionally include vibrations from machinery or traffic, addition of new loads on a slope, and removal of deep-rooted vegetation.

While Project workspaces are in a region of hilly to rugged terrain, existing compressor stations have been graded to accommodate operation, and previous workspaces have achieved slope stability. All ground disturbance at existing compressor stations would be within previously graded areas, which would minimize potential effects of Project construction on slope stability. At the Swann CS, topography has been previously modified by surface mining

activities. Mountain Valley would implement best management practices (BMP), including erosion controls and stormwater and groundwater management, as well as measures to avoid overweighing slopes during construction. Mountain Valley would store excess cut material in a permanent (engineered) on-site stockpile and haul cleared brush and timber offsite to an appropriate facility. Mountain Valley would revegetate and restore all temporary workspaces to approximate preconstruction contours; however, at the Swann CS, site grading and filing would be implemented as needed to create a safe and stable land surface to support permanent aboveground facility operation. With implementation of these measures, we conclude that the Project would not significantly contribute to, or be affected by, landslide hazards.

Karst and Ground Subsidence

Ground subsidence, involving the localized or regional lowering of the ground surface, may be caused by dissolution of carbonate or evaporite rocks, underground mines, and sediment compaction from oil, natural gas, or groundwater extraction/over pumping. As described in sections B.2.2 and B.4.1, no active oil or natural gas wells or high-volume groundwater extraction wells are within 0.25 mile of the Project. Further, based on site-specific geotechnical investigations completed at each compressor station site, subsurface geology is not susceptible to karst development (TRC, 2025; Draper Aden Associates, 2015a).

A planned extension of the Harrison County Mine underlies the Bradshaw CS at a depth of 1,230 feet, as described above. Longwall mining panels would be located adjacent to, but offset from, the eastern portion of the station, while the mains used to access these panels are expected to extend beneath the station. Mountain Valley conducted modeling to evaluate the potential for subsidence at the compressor station due to future mining activity and additional loading from construction at the Bradshaw CS (John T. Boyd Company, 2024; Tetra Tech, 2024). The modeling results indicate effects would be minimal. Based on this assessment, we conclude that the Project is unlikely to be affected by ground subsidence.

B.3. Soils

Soil characteristics within the Project area were identified and assessed using the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service's (NRCS) Soil Survey Geographic Database (USDA NRCS, 2025). Soils were evaluated according to the characteristics that could affect construction or increase the potential effects on soils during construction, restoration, and/or operation. These characteristics include farmland designation, susceptibility to compaction and erosion, revegetation potential, stony/rocky soils, and shallow bedrock. Soil characteristics and limitations for construction workspaces are detailed in table B3 in appendix B.

Across the four compressor stations, near-surface soils generally consist of fine-grained to mixed-texture materials, primarily silty clay, clay, and silt with varying amounts of sand and gravel or rock fragments (Triad, 2016a, 2016b; Tetra Tech, 2017; Schnabel Engineering, 2019). Near-surface texture soils at the proposed Swann CS are primarily channery silt loam, loam, silt loam, sandy lean clay, sandy silt, and silty sand (Schnabel Engineering, 2025). Based on geotechnical evaluations, these results indicate well drained and non-saturated soils with

groundwater generally deeper than 5 feet (Triad, 2016a, 2016b; Tetra Tech, 2017; Schnabel Engineering, 2019).

B.3.1 Prime Farmland

About 47.5 acres of soils mapped as prime farmland or farmland of statewide importance would be affected by Project construction,²¹ of which 18.2 acres have already been permanently converted to developed land use at existing compressor stations. The Swann CS workspace includes 7.8 acres of prime farmland, most of which has been previously modified by historic surface mining activities and would be permanently converted to industrial use. Remaining NRCS-designated farmland soils would be at Project laydown yards and would be restored to approximate preconstruction conditions. New permanent effects on NRCS-designated farmland soils (about 7.2 acres)²² is negligible when compared to the total acreage of prime farmland and farmland of statewide importance in Montgomery County (77,131 total acres [Soil Survey Staff, 2025]).²³ Therefore, we conclude that Project effects on the availability of prime farmland and farmland of statewide importance would not be significant.

B.3.2 Soil Compaction, Erosion, Revegetation Potential

Soil compaction modifies the structure of soils and, as a result, alters its strength and drainage properties. Soil compaction decreases pore space and water-retention capacity, which restricts the transport of air and water to plant roots and increases runoff. As a result, soil productivity and plant growth rates may be reduced, and natural drainage patterns may be altered. To reduce or mitigate potential compaction, Mountain Valley would limit construction traffic to only that required to accomplish the construction. In workspaces that would be restored following construction, Mountain Valley would till soils that have been compacted. In areas where topsoil has been segregated, the subsoil would be de-compacted before replacing the segregated topsoil; effects on soils at existing compressor stations would be negligible. At the Swann CS, construction would occur within previously disturbed areas, resulting in minor localized compaction. While some compaction may be permanent, it would be minor in scope and confined to the immediate work area.

Erosion is a natural process where surface soils are worn away, generally resulting from water and wind forces that can be accelerated by human disturbance. Soils most susceptible to erosion by water typically have bare or sparse vegetation cover, non-cohesive soil particles, and low infiltration rates, and are on moderate to steep slopes. Project construction would affect 24.4 acres considered prone to water erosion and 27.1 acres considered prone to wind erosion.²⁴

²¹ Mountain Valley June 26, 2026 supplemental response, revised table 7.3-1, FERC Accession No. 20260626-5111.

²² Transco March 31, 2025 supplemental filing, table 7.3-1, FERC Accession No. 20250331-5555.

²³ Montgomery, VA: 77,131 acres; Pittsylvania, VA: 515,022 acres; Rockingham, NC: 253,506 acres; Davidson, NC: 253,237 acres; Forsyth, NC: 173,515 acres; Guilford, NC: 327,247 acres; and Cleveland, NC: 200,674 acres.

²⁴ Mountain Valley March 20, 2026 supplemental response, attachment 1-1c revised table 7.3-1, FERC Accession No. 20260320-5294.

Mountain Valley would implement erosion and sediment control measures described in our Plan and Mountain Valley's Procedures to minimize erosion. These include installing sediment filter devices, such as silt fences and erosion control socks, immediately following initial ground disturbance; applying mulch, erosion control fabric, or an alternative as applicable; and reestablishing appropriate vegetation within temporary workspaces.

Should an extreme weather event occur during construction (heavy precipitation or an intense single-day event), project workspaces could become inundated, spoil piles could experience erosion, and erosion control devices could be overwhelmed. Individually or collectively, these actions may result in effects outside of designated workspaces and would likely increase rates of erosion, turbidity, and sedimentation. The effects of an extreme weather event(s) must be assessed and addressed in a timely manner by the Project proponent to avoid further effects on the environment. Should the Project proponent fail to address these effects in a timely fashion, the Project would be out of compliance with the requirements contained in our Plan. Specifically, our Plan requires that project proponents inspect and ensure the maintenance of temporary erosion control measures within 24 hours of each 0.5 inch of rainfall. Our Plan then requires that the repair of all ineffective temporary erosion control measures occur within 24 hours of identification, or as soon as conditions allow. These measures ensure that once an incident occurs, it would be remediated.

Poor revegetation can occur when construction activities affect topsoil quality, water-holding capacity, salinity, acidity, or soil drainage. Disturbed areas that are not successfully revegetated may also be susceptible to invasive plant species and noxious weed growth. Most of the soils in the Project workspace are characterized as having poor revegetation potential. Small areas of agricultural land may be present within the construction workspace. To aid revegetation in these areas, Mountain Valley would segregate 12 inches of topsoil, or the entire topsoil layer if it is less than 12 inches. Soil amendments may be added to disturbed areas to increase the chance of successful plant coverage after construction. Erosion and sediment control measures, as described above, would also aid revegetation by minimizing soil loss, reducing runoff velocities, and maintaining topsoil and seedbed stability in disturbed areas. Section B.5.1 provides additional information regarding Mountain Valley's revegetation and restoration measures.

B.3.3 Shallow Bedrock and Rocky Soils

In general, rocky soils have a very gravelly, extremely gravelly, cobbly, stoney, bouldery, flaggy, or channery texture. The USDA NRCS data indicate that some of the soil types at the four compressor station sites are associated with bedrock at depths less than 5 feet, confirmed by Mountain Valley's experience constructing at the existing compressor station sites and site-specific geotechnical reports. In areas with shallow bedrock, Mountain Valley would use excavation equipment to rip and remove shallow bedrock where feasible. Mountain Valley has indicated that blasting may be required during construction at the Harris and Swann CSs but would be confined to locations within Mountain Valley-owned property. Where blasting is necessary, Mountain Valley would use blasting techniques in compliance with federal and state regulations and in accordance with its Blasting Plan.

Based on the above assessment and Mountain Valley's implementation of our Plan and Mountain Valley's Procedures, we conclude that Project effects on soils would not be significant.

B.3.4 Soil Contamination

Based on U.S. Environmental Protection Agency (EPA) and state databases (EPA, 2025a; WVDEP, 2025b; VDEQ, 2025b), two sites with potential existing or historic contaminated media are within 0.5 mile of the Project: the Prochem Analytical, Inc. facility located 310 feet southeast of the Swann CS, and the Rowe Fine Furniture, Inc. facility located 180 feet south of the Swann CS. Both facilities reported prior violations in Resource Conservation and Recovery Act Toxics Release Inventories. Publicly available information for these sites does not indicate that spills have occurred (EPA, 2024a, 2025b), and the facilities are currently in compliance (EPA, 2025a). Because of this, the distance from each of these sites to Project workspaces, and the fact that both are topographically downgradient of the Project, we conclude that Project activities are unlikely to encounter existing contaminated soil or groundwater.

Mountain Valley would implement its SPCC Plan during construction to prevent and, if necessary, contain inadvertent spills of fuels, lubricants, coolants, or solvents. If soils exhibiting potential indications of contamination (such as staining) are unexpectedly encountered during construction, work in the area of the suspected contamination would be halted. Mountain Valley would notify all applicable agencies and identify a response action based on the type and extent of the contamination, as well as the requirements of federal, state, and local regulations. With Mountain Valley's proposed minimization and response measures, we conclude that the Project would not significantly contribute to, or be significantly affected by, soil or groundwater contamination.

B.4. Water Resources

B.4.1 Groundwater

Bedrock aquifers are the primary source of groundwater in the Project area. In Wetzel and Braxton Counties, West Virginia, the Project overlies Pennsylvanian aquifers consisting of cyclic sequences of fractured sandstone, shale, conglomerate, clay, coal, and minor limestone. Wells completed within these aquifers generally yield between 5 and 400 gallons per minute (gpm) (Trapp and Horn, 1997). In Fayette County, West Virginia, the Project overlies Mississippian aquifers consisting predominantly of sandstone and limestone with shale. Yields are typically 5 to 100 gpm in wells completed in the Greenbrier Limestone and 5 to 120 gpm in wells completed in the Pocono Group. In Montgomery County, Virginia, the Project overlies the Valley and Ridge regional aquifer system consisting of Paleozoic carbonate rocks and sandstones. Well yields vary widely, from 10 to 400 gpm, depending on the formation in which the well is completed (Trapp and Horn, 1997). Water quality is generally suitable for drinking in aquifers underlying the Project but may be affected locally by contamination from septic systems or coal mining activities, or from improperly abandoned oil and gas wells.

The Project does not overlie sole source aquifers²⁵ (EPA, 2025c). Based on Mountain Valley's correspondence with administrators of state wellhead protection programs, the Project would not be within any wellhead protection areas. Based on Mountain Valley's correspondence with the Virginia Department of Health Office of Drinking Water (VDH-ODW), no public water supply wells are located within 1 mile of the Swann CS or Swann CS Laydown Yard. Mountain Valley requested information from the WVDEP Division of Water and Waste Management regarding public water supply wells near the Project in West Virginia but did not receive a response. Publicly accessible database information for private wells in West Virginia and Virginia is not available. Mountain Valley owns water supply wells at the Bradshaw and Harris CSs. Mountain Valley's existing wells would be protected in accordance with Mountain Valley's SPCC Plan. Blasting activities at the existing Harris CS, if required, would occur at a sufficient distance from the location of existing water supply wells to avoid damage. Site-specific protection of facilities during blasting activities would be furthered by implementation of a contractor-specific blasting plan consistent with Mountain Valley's Blasting Plan. All water wells would be protected with a protective barrier. Based on outreach to adjacent landowners, Mountain Valley has not identified any other private wells or springs within 150 feet of the Project.

A commenter expressed concern that Project groundwater withdrawal could lower the water table and affect streams and wetlands. As described in section B.4.2, Mountain Valley would use only municipal water sources for the Project. If trench dewatering becomes necessary, we expect any resulting changes in water levels and/or turbidity in shallow groundwater to be localized and temporary because water levels quickly re-establish equilibrium and turbidity levels rapidly subside. Commenters expressed concerns about contamination of groundwater and water supply wells. To minimize the potential for construction-related spills to affect groundwater, Mountain Valley would implement its SPCC Plan during construction to prevent and, if necessary, contain inadvertent spills of fuels, lubricants, coolants, or solvents.

As described in section B.3.4, the only potential sources of contamination within 0.5 mile of the Project are two sites located 180 feet and 310 feet from the Swann CS. No spills have been documented at these sites. Furthermore, observations made during well installation and geotechnical borings at the compressor station sites indicate the water table in the project area is deep below the ground surface. Therefore, the probability of encountering contaminated groundwater during Project construction is low. If groundwater exhibiting potential indications of contamination (such as odors or sheen) are unexpectedly encountered during construction, Mountain Valley would notify and coordinate with the appropriate state and federal agencies in accordance with applicable notification requirements. With Mountain Valley's proposed minimization and response measures, we conclude that the Project would not significantly contribute to, or be significantly affected by, groundwater contamination.

²⁵ The EPA defines a sole source aquifer as an aquifer that supplies at least 50 percent of the drinking water consumed in its service area and where there are no other reasonably available alternative drinking water sources should the aquifer become contaminated.

B.4.2 Surface Water

Commenters expressed concern about effects on drinking water sources, including Spring Hollow Reservoir.²⁶ According to state database reviews, there are no source water protection areas or designated water supply protection areas within 3 miles of the Project area (VDH-ODW, 2024; Western Virginia Water Authority [WVWA], 2015). Spring Hollow Reservoir, which impounds water from the Roanoke River for the WVWA public water system, is about 1 mile east of the Swann CS Laydown Yard. No waterbodies would be affected by the use of the laydown yard, and the two ephemeral waterbodies at the Swann CS—about 1.4 miles west of the Spring Hollow Reservoir and separated by forested area—are not hydrologically connected to the reservoir. Thus, Project activities would not affect this resource.

In accordance with section 303(d) of the Clean Water Act (CWA), states must establish water quality standards for all surface waters within the state. Waters that fail to meet their designated use are considered impaired, are listed in a state's section 303(d) list of impaired waters, and would be required to develop monitoring and mitigation programs. Based on a review of the statewide 303(d) impaired waters and 305(b) through the EPA's online database, no impaired waterbodies are crossed by Project facilities (EPA, 2025d). South Fork Fishing Creek, which is 28 feet²⁷ from the nearest edge of the Bradshaw CS Laydown Yard, has documented water quality impairments; however, a final section 303(d) listing determination has not been made by West Virginia at the time this EA was issued (EPA, 2024b).²⁸

The Federal Emergency Management Agency (FEMA) designates floodplains based on an area's probability of flooding. A Special Flood Hazard Area (SFHA) has a 1 percent annual chance of a flood, also referred to as the 100-year flood zone. About 4.2 acres of workspace within the Bradshaw CS Laydown Yard are within an SFHA.²⁹ Temporary storage and workspace within this yard would have a minimal effect on flood storage capacity and only during the construction phase. No other compressor station sites or Project components are within a 100-year floodplain. Mountain Valley would comply with FEMA guidelines and consult with local municipal agencies to secure any necessary permits for temporary storage within the SFHA.

²⁶ *E.g.*, Sam Rasoul, Virginia General Assembly Delegate, December 19, 2025 Comment on Filing, FERC Accession No. 20251219-5187.

²⁷ Mountain Valley April 20, 2026 response to EIR 2, attachment 1-10, FERC Accession No. 20260420-5234.

²⁸ West Virginia submitted water quality data to the EPA for Report Year 2024; no determination has been made for state 303(d) listing at the time this EA was issued. Water quality parameters impaired for South Fork Fishing Creek are public water supply and water contact recreation (fecal coliform exceedances) and warmwater fishery (benthic macroinvertebrates assessments and iron levels).

²⁹ Mountain Valley October 23, 2025 Application, Resource Report 2 table 2.2-2, FERC Accession No. 20251023-5112.

Water Use

Project construction would require about 120,000 gallons³⁰ of water for hydrostatic testing at the Swann CS. No hydrostatic testing would be required at existing compressor stations. For dust suppression, an estimated 5,000 gallons of water would be used at each site (total of 20,000 gallons) per day.³¹ All source water would be provided by municipal hydrants from either the WVWA or the Montgomery County Water Department.

Following testing, test water would be discharged to well-vegetated upland areas through energy-dissipating structures designed to minimize erosion and comply with National Pollutant Discharge Elimination System permit conditions. At the Swann CS, hydrostatic test water would be discharged at a well-vegetated upland area outside the limits of disturbance.³² If the designated discharge area is unavailable due to ongoing construction activities, Mountain Valley would return the test water to tanks and transport it offsite for disposal in accordance with applicable regulations. All hydrostatic testing would be conducted in accordance with Mountain Valley's Procedures and state permit guidelines.

Surface Water Effects and Mitigation

Based on field delineations of the proposed facilities, the Project would not affect permanent or intermittently flowing waterbodies. Two ephemeral, minor waterbodies would be permanently affected by the Swann CS, as shown in table B.4-1. Ephemeral waterbodies exist only for a short period following rainfall or snowmelt. These features dry up quickly, do not have year-round flow, and are not sustained by groundwater.

TABLE B.4-1					
Summary of Waterbodies Within the Project Area					
County, State	Project Component	Feature ID ^a	Flow Regime	Linear Feet within Project Area ^b	Effect
Montgomery, Virginia	Swann CS	S-05	Ephemeral	305	Within compressor station operational boundary, crossed by proposed 42-inch discharge line and in the construction right-of-way for electrical power line
Montgomery, Virginia	Swann CS	S-06	Ephemeral	187	Within compressor station operational boundary
Source: Mountain Valley October 23, 2025 Application, Resource Report 2 table 2.2-3, FERC Accession No. 20251023-5112.					
^a Feature ID is unique code designated to waterbodies identified during field surveys.					
^b This indicates the total linear feet of the delineated ephemeral drainages within the Project area. The total Project area is approximately 65.3 acres, including 25.1 acres associated with the Swann CS. The length affected within the Project area would be based on the final civil design of the Swann CS and would be less than the total linear feet within the Project area.					

³⁰ Mountain Valley October 23, 2025 Application, Resource Report 2 at 2-13, FERC Accession No. 20251023-5112.

³¹ *Id.*

³² Mountain Valley July 6, 2026 response to EIR 3 question 1 under Resource Report 2, FERC Accession No. 20260706-5190. Also see appendix A.

Ephemeral waterbodies S-05 and S-06 are within the permanent operational boundary of the Swann CS (i.e., within the fenceline of the facility, but not within the permanent footprint for the compressor station). Waterbody S-05 would be crossed by the construction of the proposed 42-inch discharge line, and waterbodies S-05 and S-06 would be in the electric conduit right-of-way. Waterbodies S-05 and S-06 would be altered and may be filled by construction activities. Mountain Valley would address post-construction site drainage through the E&SCP and post-construction stormwater management measures. Appropriate site drainage would be incorporated into the final facility design in accordance with applicable state and local requirements. Mountain Valley would optimize site grading and equipment placement to preserve pre-existing site drainage to the extent practicable.

Temporary work activities at the Bradshaw CS Laydown Yard would occur within 50 feet of South Fork Fishing Creek. In compliance with section II.A.1 of the FERC Procedures, Mountain Valley provided site-specific justification for locating extra work areas within 50 feet of a waterbody. Mountain Valley also requests modification to sections IV.A.1d and IV.A.1e of the FERC Procedures. Table B2 in appendix B describes Mountain Valley's site-specific modifications and alternative measures to the FERC Procedures, and the associated justifications.³³ We have reviewed these site-specific justifications and alternative measures and conclude they are sufficiently justified. No additional ground disturbance would occur. Mountain Valley would install erosion and sediment control devices at the laydown yard to limit sediment offsite; and vehicle parking, equipment storage, and material stockpiling would not result in an addition of fecal coliform or iron to South Fork Fishing Creek. Thus, Project activities at the Bradshaw CS Laydown Yard would not contribute to worsening condition of this impaired water.

A commenter expressed concern over the proximity of the Bradshaw CS Laydown Yard to South Fork Fishing Creek.³⁴ The site of this laydown yard is currently in industrial use, and it is not anticipated that any additional earth disturbance would occur. Mountain Valley would prepare a site-specific E&SCP and place necessary erosion and sediment controls to protect the existing wetlands and South Fork Fishing Creek. Additionally, commenters expressed concerns about potential effects on surface waters related to water quality conditions, runoff from construction of the Swann CS, and the proximity of construction workspaces to streams.³⁵ To reduce effects on waterbodies, Mountain Valley would adhere to our Plan and Mountain Valley's Procedures as well as its E&SCP, which include requirements for erosion control, stabilization, and revegetation measures designed to minimize sediment transport into off-site waterbodies.

Temporary effects on surface water could result from inadvertent spills or leaks of hazardous materials during construction. Mountain Valley would implement its site-specific SPCC Plan to prevent and, if necessary, control inadvertent releases. Hazardous materials, chemicals, and fuels would not be stored, parked, or serviced within 100 feet of any waterbody, and restricted areas would be clearly marked with signage during construction. Based on the

³³ Mountain Valley April 20, 2026 response to EIR 2 question 5 under Resource Report 2, FERC Accession No. 20260420-5234.

³⁴ Appalachian Voices December 19, 2025, Comment on Filing, FERC Accession No. 20251219-5575.

³⁵ *E.g.*, Jim Minick December 19, 2025, Comment on Filing, FERC Accession No. 20251219-5222.

above assessment, we conclude that effects on surface water from the Project would not be significant.

B.4.3 Wetlands

Wetlands are areas inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Mountain Valley completed a wetland delineation for Project facilities in July 2025. Table B.4-2 shows that two wetlands would be affected by the Project.³⁶ Wetlands delineated within and adjacent to the Project area are included in Mountain Valley’s wetland delineation report.³⁷

TABLE B.4-2					
Summary of Wetlands Within the Project Area					
County, State	Project Component	Wetland ID ^a	Wetland Type ^b	Wetlands Affected During Construction (acres) ^c	Wetlands Affected During Operation (acres) ^c
Fayette, West Virginia	Stallworth CS	W-10	PEM	0.01	0.01
Montgomery, Virginia	Swann CS	W-03	PEM	0.08	0.08

Sources: Mountain Valley October 23, 2025 Application, Resource Report 2 table 2.3-1, FERC Accession No. 20251023-5112; Mountain Valley April 20, 2026 response to EIR 2, FERC Accession No. 20260420-5234.

a Feature ID is a unique code designated to waterbodies identified during field surveys.

b Cowardin et al. (1979) wetland classification: PEM = palustrine emergent.

c Construction acreages also include the land for operation.

At the Stallworth CS, one palustrine emergent (PEM) wetland (W-10; not U.S. Army Corps of Engineers [USACE] jurisdictional) is 2 feet west of the compressor station’s existing footprint. This 0.02-acre³⁸ wetland (hilltop seep) formed in a previously disturbed area following construction of the compressor station. Representative species within the wetland include cockspur grass (*Echinochloa crus-galli*), red top (*Agrostis gigantea*), and soft rush (*Juncus effusus*).³⁹ The proposed expansion of the Stallworth CS would permanently affect wetland W-10. Construction and operation of the modified Stallworth CS would result in this wetland being almost entirely enclosed within the proposed fenced site. For the proposed Swann

³⁶ Mountain Valley June 26, 2026, supplemental Information, attachment 1-2, FERC Accession No. 2026-5111 includes the latest alignment sheet with delineated wetlands for the Swann CS and laydown yard site. Mountain Valley October 23, 2025 Application, Resource Report 2 appendix 2-B1 and 2-B2, FERC Accession No. 20251023-5112 includes the latest alignment sheets for the Bradshaw, Harris, and Stallworth CSs and associated laydown yards. See Resource Report 2, appendix 2-B1 and 2-B2, FERC Accession No. 20251023-5112 for the Wetland Delineation Reports for the proposed Project.

³⁷ Mountain Valley June 26, 2026, supplemental filing, Supplemental Aquatic Resource Survey Memorandum; Mountain Valley October 23, 2025 Application, Resource Report 2 table 2.2-3, FERC Accession No. 20251023-5112.

³⁸ Mountain Valley October 23, 2025 Application, Resource Report 2 appendix 2-B1, FERC Accession No. 20251023-5112.

³⁹ Mountain Valley October 23, 2025 Application, Resource Report 2 appendix 2-B1, FERC Accession No. 20251023-5112. Also see appendix A.

CS, one 0.08-acre⁴⁰ PEM wetland is in the footprint of a former surface mine (shale/clay) for brickmaking; this wetland is not USACE jurisdictional and appears to be a post-construction manmade stormwater management basin. Representative species within the wetland include soft rush, Chinese bush clover (*Lespedeza cuneata*), and oriental lady's thumb (*Persicaria longiseta*).⁴¹

Effects of construction (including operation of construction equipment) would be limited to the two wetlands within the permanent compressor station footprints; no additional wetland effects would occur as a result of the Project construction or operation. At the proposed Swann CS, wetland W-04 is located along the existing permanent access road but would not be disturbed. The associated additional temporary workspace (ATWS) would be located approximately 12.5 feet from wetland W-04. The upland adjacent to W-04 consists of cultivated or rotated cropland or other disturbed land; therefore, the ATWS is in accordance with our Procedures and does not constitute a modification to our Procedures VI.B.1.a. Mountain Valley would adhere to our Plan and Mountain Valley's Procedures and use existing access roads during construction and operation. Although wetland W-10 would be permanently filled, Mountain Valley determined that using previously disturbed land, on which wetland W-10 formed, is more environmentally advantageous than eastward expansion of the Stallworth CS. By using previously disturbed land, Mountain Valley minimized effects on previously undisturbed vegetation, wetland resources, and potential geologic challenges (sloped terrain). Similarly, for the proposed Swann CS, Mountain Valley sited the facility on a previously disturbed former surface mine and would maintain a forested buffer between the South Fork Roanoke River and the Swann CS footprint to minimize effects on wetland and water resources in the region.

To avoid or minimize effects on adjacent wetlands from accidental spills or leaks of hazardous materials, Mountain Valley would implement its Project-specific SPCC Plan⁴² during construction. The SPCC Plan includes preventive measures such as personnel training, equipment inspection, and refueling procedures. As stated in section A.6, Mountain Valley proposes modifications to our Procedures as summarized in table B2 in appendix B. FERC Procedures prohibit the following within 100 feet of a wetland: refueling activities; parking, servicing, and storage of construction equipment, vehicles, and materials; storage of hazardous materials; and others.

Mountain Valley provided justification for the proposed modifications to our Procedures. We have reviewed these alternative measures and conclude they are sufficiently justified. Similar to mitigation discussed in section B.4.2, sediment runoff into adjacent wetlands would be avoided or minimized through the implementation of the Project-specific E&SCP and Mountain

⁴⁰ Mountain Valley October 23, 2025 Application, Resource Report 2 appendix 2-B2, FERC Accession No. 20251023-5112.

⁴¹ Mountain Valley October 23, 2025 Application, Resource Report 2 appendix 2-B2, FERC Accession No. 20251023-5112. Also see appendix A.

⁴² Mountain Valley October 23, 2025 Application, Resource Report 2 appendix 2-A1 and appendix 2-A2, FERC Accession No. 20251023-5112.

Valley's Procedures. These plans include requirements for erosion control, stabilization, and revegetation measures designed to minimize sediment transport into off-site wetlands.

Mountain Valley would obtain all necessary permits for permanent fill effects prior to construction. On November 12, 2025, USACE Huntington District issued an approved jurisdictional determination indicating the Project would avoid regulated discharges into waters of the United States at the Stallworth CS. Therefore, no Nationwide Permit 12 verification is required for W-10. On December 23, 2025, the WVDEP determined that the Project would not affect federally jurisdictional wetlands and that the permanent effect of isolated W-10 is below the threshold; therefore, a WVDEP State Waters Permit is not required for the Project.⁴³ On April 14, 2026, Mountain Valley conducted a site visit with representatives from the USACE Norfolk District and the VDEQ. On June 16, 2026, the USACE Norfolk District issued a Preliminary Jurisdictional Determination (PJD). Based on the PJD, the Project would not affect jurisdictional Waters of the U.S., and no permit under section 404 of the CWA would be required. On April 29, 2026, Mountain Valley received a State Surface Waters Determination (SSWD) from the VDEQ.⁴⁴ Because the Project would not involve alteration of state surface waters, a Virginia Water Protection Permit or a State Water Quality Certification under section 401 of the CWA would not be required. Because Mountain Valley would adhere to its Procedures and its Project-specific SPCC Plan, we conclude that the effects on wetland resources from the Project would be less than significant.

B.5. Vegetation and Wildlife

B.5.1 Vegetation

Vegetation communities in the Project area include agricultural land (pastures, hayfields), forests, upland scrub-shrub land, and herbaceous upland.⁴⁵ Vegetation cover at the proposed Swann CS site and associated laydown yard consists of forested and agricultural lands. There is little to no vegetation cover within the three existing compressor stations' fencelines.

Construction of the Project would affect a total of 65.3 acres of land, of which 27 percent (17.6 acres) consists of agricultural production and 19.3 percent (12.6 acres) consists of forested land. About 6.1 percent (4.0 acres) consists of scrub-shrub land and herbaceous upland.⁴⁶ All

⁴³ Mountain Valley January 7, 2026 West Virginia Department of Environmental Protection State Waters Permit Determination, FERC Accession No. 20260107-5071; Mountain Valley July 6, 2026 EIR 3 question 1 under general, Attachment General 1-1, table 1.7-1, FERC Accession No. 20260107-5071.

⁴⁴ Mountain Valley June 26, 2026 Supplemental Information, attachment 2-2, FERC Accession No. 20260626-5111.

⁴⁵ Agricultural lands include pastureland, hay fields, and cultivated crops. Upland deciduous forested areas are dominated by trees generally greater than 15 feet tall and contain greater than 20 percent of total vegetation cover. Scrub-shrub lands are areas that are covered by more than 20 percent by shrubs less than 15 feet tall, while herbaceous uplands are non-wetland areas vegetated by non-woody vegetation (e.g., grasses and forbs) that are natural or semi-natural grasslands. All agricultural lands are pastures or for hay production; no land for crops was identified as potentially affected by the Project.

⁴⁶ Mountain Valley June 26, 2026 supplemental response, revised tables 1.3-1 and 3.2-1, FERC Accession No. 20260626-5111.

construction-related effects on agricultural lands and forested lands would occur at the proposed Swann CS and associated laydown yard. Operation of the Project would affect 3.6 acres of agricultural land, 12.6 acres of forested land, and 2.5 acres of scrub-shrub and herbaceous vegetation.⁴⁷ As described in section A.5, about 28 percent (18.2 acres) of land required for construction would be within the existing Mountain Valley Mainline permanent right-of-way. Table B4 in appendix B provides details regarding the acreage of specific vegetation types affected by the Project components.

Construction activities resulting in ground disturbance, such as clearing and grading, may reduce or eliminate barriers to non-native species, especially those with invasive growth characteristics. Once established, noxious or invasive plant communities could displace native plant species, thereby negatively altering the appearance, composition, and habitat value of affected areas. Mountain Valley identified highly invasive plant species with the potential to occur in the Project area.⁴⁸ For the proposed Swann CS, Mountain Valley conducted a field assessment of noxious and invasive plant species during the 2026 growing season. The assessment identified 23 noxious and invasive plant species within the Swann CS, as summarized in table B5 in appendix B.⁴⁹ Mountain Valley does not anticipate transporting equipment between compressor stations and associated facilities.

To minimize the potential for the introduction of noxious weeds and invasive species during construction, the EI would be trained to recognize noxious or highly invasive plant species. The EI would ensure all contractors clean the tracks, tires, and blades of equipment to remove excess soil prior to movement of equipment out of known weed or soil-borne pest-infested areas. Additionally, Mountain Valley contractors would be required to thoroughly clean all construction equipment, such as with high-pressure washing, prior to moving the equipment to the Project area to limit the potential for the spread of noxious weeds, insects, or other soil-borne pests.

All workspaces needed only during construction would be revegetated and restored to their previous vegetative status, in accordance with landowner agreements, or maintained in an herbaceous status per FERC's Plan. Actively managed areas that were temporarily disturbed outside the permanent compressor stations would be re-seeded with a native vegetative seed mix and allowed to revegetate naturally. Additional noxious and invasive plant species mitigation measures are included in Mountain Valley's Noxious Weed and Invasive Species Plan.⁵⁰ We

⁴⁷ Mountain Valley June 26, 2026 supplemental response, attachment 1-1c revised table 3.2-1, FERC Accession No. 20260626-5111.

⁴⁸ "Highly noxious invasive plant species" refers to "Highly Invasive" plants identified by the West Virginia Department of Natural Resources (WVDNR, 2025) and species of "High" invasiveness as listed by the Virginia Department of Conservation and Recreation (Heffernan et al., 2024), which are listed together under the category of "highly invasive plant species" in table B6 in appendix B.

⁴⁹ Mountain Valley July 6, 2026 response to EIR 3 question 5 under Resource Report 3, Attachment 3-5, table 3 (Noxious Plant Patches in the Swann CS) and table 4 (Noxious Plant Isolated Instances in the Swann CS), FERC Accession No. 20260706-5190.

⁵⁰ Mountain Valley July 6, 2026 response to EIR 3 question 5 under Resource Report 3, Attachment 3-5, FERC Accession No. 20260706-5190.

expect that herbaceous vegetation would require about 1 to 5 years to return to approximate preconstruction conditions.

At the Swann CS property, upland woody vegetation (forests and scrub-shrub land) would be permanently affected because 12.6 acres of forested land and 1.3 acres of scrub-shrub would be converted to industrial land.⁵¹ All vegetated land within the Swann CS fenced property would be maintained in an herbaceous cover to support long-term operation of the facility. To reduce effects on undisturbed, more mature forested habitat, Mountain Valley sited Swann CS on a previously disturbed site, which had revegetated with trees. Mountain Valley also collocated the temporary workspaces for the proposed 42-inch discharge and suction lines within previously approved limits of disturbance for the Mountain Valley Mainline.

During restoration, Mountain Valley would follow the seeding requirements in its E&SCP and implement measures in FERC's Plan regarding weed- and pest-free soil. Mountain Valley would also implement its Exotic and Invasive Species Control Plan at all existing facilities (Bradshaw, Harris, and Stallworth CSs)⁵² and the site-specific Noxious Weed and Invasive Species Control Plan for the proposed Swann CS, which we have reviewed and find to be acceptable.⁵³ Therefore, we conclude that the Project would have both short-term and long-term effects on vegetation, but the overall effects would not be significant.

B.5.2 Wildlife

The Project workspaces include habitats that could support a variety of wildlife species. Common wildlife species that may be found near the Project facilities are various game (e.g., white-tailed deer, wild turkey) as well as small mammal species. Additionally, wetlands (described in section B.4.3) may provide suitable habitat for amphibians and reptiles such as green frog, eastern painted turtle, and common garter snake; however, the small size and setting of wetlands at the Stallworth CS would likely limit their overall habitat suitability. Scrub-shrub habitat in the Project area may provide suitable foraging grounds for the prairie warbler, eastern towhee, indigo bunting, eastern cottontail, and red fox. Several commenters expressed concern about the effects of artificial lighting of the proposed compressor station on the night sky conditions and its effects on wildlife.⁵⁴ Potential effects of artificial lighting on migratory birds are discussed further under section B.5.3 and visual resources under section B.7.2. During construction, standard work schedules would be from 7:00 a.m. to 7:00 p.m., or daylight hours (in spring, summer, and fall, when sunset occurs later in the evening, construction activities may

⁵¹ Mountain Valley March 20, 2026, supplemental response to question 1 under Resource Report 1, attachment 1-1c revised table 3.2-1, FERC Accession No. 20260320-5294.

⁵² Mountain Valley April 20, 2026 response to EIR 2 question 2 under Resource Report 3, FERC Accession No. 20260420-5234.

⁵³ Mountain Valley July 6, 2026 response to EIR 3 question 5 under Resource Report 3, FERC Accession No. 20260706-5190; see the Noxious Weed and Invasive Species Control Plan (Attachment 3-5).

⁵⁴ *E.g.*, Craig County April 8, 2026, Motion to Intervene, FERC Accession No. 20260408-5060; Amy Adams, December 8, 2025, Comment on Filing, FERC Accession No. 20251208-5169.

continue after 7:00 p.m.).⁵⁵ Lighting may be used beyond these hours for activities that require around-the-clock operations, such as hydrostatic testing, tie-in welds, and when necessary to ensure safety or timely completion of a critical task. The three existing compressor stations (Bradshaw, Stallworth, and Harris) already have established lighting in place, and Mountain Valley does not propose changing operational lighting features at these compressor stations; the Project would supplement this lighting as needed to support safe operations. New lighting associated with the Project would be primarily limited to the proposed Swann CS. To minimize intensity, duration, and spatial extent of lighting effects from aboveground facilities during construction, Mountain Valley would use fully shielded and directional lighting fixtures and implement workday restrictions (daylight hours) listed above. As a result, lighting associated with the Project is not expected to disrupt wildlife behavior or movement patterns in the surrounding area to a degree that would constitute a significant effect on wildlife. During operation, permanent lighting would use fully shielded, full cut-off fixtures designed to direct light downward to support safe operation, maintenance, and security of the facilities. These measures would minimize light spill into adjacent habitats and reduce potential effects on wildlife. Operational lighting effects on wildlife from the proposed Swann CS are expected to be localized and minor.

Several commenters expressed concern about the effects of noise on wildlife.⁵⁶ A commenter expressed concern about the effects the Project may have on bird and bat species.⁵⁷ Effects and mitigation measures for bird and bat species are discussed in greater detail in section B.5.3 under subsections on Migratory Birds and Federally Listed Species. The Project could affect wildlife during construction and operation in various ways including habitat loss, mortality of individuals less mobile during construction, stress-induced behavioral changes during the breeding and nesting season, human disturbance and noise from station construction and operation, increased competition due to habitat loss. Larger, more mobile species would be temporarily displaced mostly because of increased noise, while less mobile species would be affected due to vegetation loss and ground disturbance. Most species are likely acclimated to human disturbance and noise in the area and would return after the conclusion of construction and restoration of the Project workspaces. Wildlife found near the existing compressor stations likely are accustomed to human disturbances and noise from station operation. Noise during operation of the proposed Swann CS may affect nearby wildlife in the area; however, individual wildlife species are expected to habituate to facility operations and reoccupy adjacent habitats following completion of construction activities.

As shown in table B4 in appendix B, the proposed Swann CS would affect 34.2 acres of wildlife habitat, of which 12.6 acres of forests would be permanently unavailable for tree-dependent species. To reduce effects on general wildlife, in addition to species of special concern and migratory birds, Mountain Valley sited the proposed Swann CS on a former surface mine, bordered by existing transportation corridors, and collocation of temporary workspaces for

⁵⁵ Mountain Valley February 13, 2026 response to EIR 1 question 8 under Resource Report 1, FERC Accession No. 20260213-54147. Mountain Valley would conduct construction activities 6 days per week (typically Monday through Saturday).

⁵⁶ *E.g.*, Mary Capp, December 19, 2025, Comment on Filing, FERC Accession No. 20251219-5089.

⁵⁷ Amy Adams, December 8, 2025, Comment on Filing, FERC Accession No. 20251208-5169.

the 42-inch suction and discharge lines with the existing Mountain Valley Mainline system. By using previously disturbed areas within and adjacent to existing facilities, effects on most wildlife are minimized and effects on undisturbed forests south of the Swann CS are avoided.

Likewise, modifications at aboveground facilities would not remove continuous tracts of habitat or segment habitat connectivity, and we do not anticipate areas in the vicinity of Project facilities to be used by wildlife for foraging or breeding. Therefore, we conclude that effects on wildlife from construction and operation of the Project would not be significant.

B.5.3 Special Status Species

Protected species and special status species are afforded protection by law, regulation, or policy by federal and state agencies. Protected species and special status species include migratory birds, including bald and golden eagles;^{58, 59} federally listed threatened and endangered species; and state-listed species.

Migratory Birds

The Project would be within Bird Conservation Region 28 (Appalachian Mountains), which supports a variety of migratory bird species, including 15 Birds of Conservation Concern (BCC)⁶⁰ and the bald eagle, as shown in table B6 in appendix B (FWS, 2021). Suitable breeding, foraging, and stopover habitat for these species occurs within and adjacent to the Project area, including forested uplands, scrub-shrub habitats, herbaceous vegetation, wetlands, and agricultural lands. Bald eagle habitat is present in the broader region, and suitable habitat for other migratory birds occurs near all Project components. No bald eagles or bald eagle nests were identified near the proposed Project area. Mountain Valley would conduct bald eagle nest surveys prior to the start of construction. If a bald eagle nest is identified in or near the Project area, Mountain Valley would implement appropriate avoidance and minimization measures, including establishment of appropriate protective buffers, consistent with the FWS's *National Bald Eagle Management Guidelines*.⁶¹

⁵⁸ Migratory birds are protected under the Migratory Bird Treaty Act (16 U.S.C. 703–711). The Migratory Bird Treaty Act, as amended, prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. Bald and golden eagles are additionally protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668–668d). Executive Order 13186 (66 CFR 3853) directs federal agencies to identify where unintentional take is likely to have a measurable negative effect on migratory bird populations and to avoid or minimize adverse effects on migratory birds through enhanced collaboration with the FWS.

⁵⁹ On March 30, 2011, the FWS and the Commission signed a Memorandum of Understanding that focuses on avoiding or minimizing adverse effects on migratory birds and strengthening migratory bird conservation through enhanced collaboration between the two agencies.

⁶⁰ BCC are a subset of protected birds under the Migratory Bird Treaty Act and include all species, subspecies, and populations of migratory non-game birds that are likely to become candidates for listing under the ESA without additional conservation actions.

⁶¹ Mountain Valley July 6, 2026 response to EIR 3 question 2 under Resource Report 3, FERC Accession No. 20260706-5190.

During active construction, increased noise levels, vegetation clearing, and human activity may temporarily discourage migratory birds from nesting or foraging in areas immediately surrounding the Project. Resident and migratory birds present in the vicinity would likely relocate to a nearby suitable habitat for the duration of construction activities. Tree clearing at the Swann CS would result in the removal of potential nesting habitat, which could affect migratory birds, including BCC, if present during the breeding season. However, given the previously disturbed nature of the site and availability of adjacent habitat, these effects would be limited and localized, and displaced individuals would be expected to move to adjacent suitable habitat.

Certain construction activities, such as hydrostatic testing and subsequent pig runs to clean and dry the pipe, as well as tie-in welds, may require limited nighttime operations for safety or logistical reasons. Where nighttime construction operations are required, Mountain Valley would avoid upward-projected lighting by using fully shielded, downward facing lighting fixtures to minimize light effects from aboveground facilities. Effects associated with light pollution are expected to be minimal given the Project's commitment to limiting nighttime construction activities and using downward-projected lights. Construction lighting effects would be temporary and likely would not have notable effects on local populations of migratory birds or BCC.

While construction of the Project would entail removing vegetation at existing compressor stations and permanently for the proposed Swann CS and expanded existing compressor stations, Mountain Valley would implement time-of-year restrictions for tree clearing and vegetation removal, when feasible.⁶² Mountain Valley would implement avoidance and conservation measures listed in its Migratory Bird Conservation Plan, thereby minimizing potential effects during the breeding and nesting season for most migratory birds.⁶³ These measures include conducting nesting bird surveys in potential migratory bird habitat within the Project area between March 15 and August 31 before construction-related vegetation clearing (e.g., tree clearing and grubbing), and for early-season nesters, a large bird nest survey will be conducted in areas where tree removal is planned between January 1 and March 31.

During operation, the modified existing compressor stations would continue to generate noise; however, migratory birds in these areas are likely accustomed to such disturbance and are expected to continue using adjacent habitats. Similarly, although the proposed Swann CS would introduce a new continuous noise source, birds in the vicinity are expected to habituate to operational noise conditions and continue using nearby habitats. Where artificial lighting is required (e.g., for safety and during low-light conditions), the Project would employ fully shielded, downward-directed lighting to minimize light exposure beyond active work areas and reduce potential disturbance to migratory birds. With implementation of these avoidance and minimization measures, we conclude that the Project would not result in population-level effects on migratory birds or BCC.

⁶² Mountain Valley July 26, 2026 supplemental filing, tree clearing window, FERC Accession No. 20260626-5111.

⁶³ Mountain Valley July 30, 2026 supplemental filing, Attachment A, FERC Accession No. 20260730-5116.

Federally Listed Species

Federal agencies are required under section 7 of the ESA, as amended, to ensure that any actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of a federally listed endangered or threatened species, or result in the destruction or adverse modification of the designated critical habitat of a federally listed species. As the lead federal agency authorizing the Project, FERC is required to consult with the FWS to determine whether federally listed endangered or threatened species or designated critical habitat are found in the vicinity of the Project, and to evaluate the proposed action's potential effects on those species and/or critical habitats.

Although proposed species, species under review, and proposed critical habitat do not receive federal protection through the ESA, we considered the potential effects on these species and habitats so that section 7 consultation could be facilitated if one or more of these species become listed before or during Project construction.

The Project is in the jurisdictional areas of the FWS Ecological Services Field Office in West Virginia and Virginia. In March 2026, Mountain Valley submitted a Biological Assessment to the FWS that summarized the effects on federally listed and proposed species with potential to occur in relevant proximity to the Project. FERC is consulting with the FWS regarding potential effects, and avoidance and minimization efforts related to federal listed species.

According to the FWS' Information for Planning and Consultation (IPaC) tool, 11 species are listed or proposed for listing that could occur in the Project area.⁶⁴ Federally listed species and proposed species that could be affected by the Project and their associated habitat are summarized in table B.5-1 along with our determinations for the Project's effects on species. Although ESA consultation with FWS is ongoing, we made effects determinations for listed species and jeopardy determinations for the proposed endangered tricolored bat and proposed threatened monarch butterfly, based on our review of currently available information and survey data. The salamander mussel, longsolid, round hickorynut, snuffbox, small whorled pogonia, smooth coneflower, and Virginia spiraea have the potential to occur within portions of the Project area. We conclude the Project would have *no effect* on these species because Project effects would not reach locations where freshwater mussel species could occur. Additionally, areas directly and indirectly affected by the Project do not support suitable habitat for the small whorled pogonia or Virginia spiraea. In June 2026, Mountain Valley conducted smooth coneflower botanical surveys, and no occurrences were documented within the proposed Swann CS site or laydown yard; the species was also not detected during previous surveys in adjacent areas along the Mountain Valley Mainline.⁶⁵ The Roanoke logperch was identified as endangered in the FWS IPaC; however, this species has been delisted federally effective August 21, 2025. There are no designated critical habitats for listed species in the Project area.

⁶⁴ "Project area" is defined to be the limits of disturbance for construction of the Project. Source: Mountain Valley February 13, 2026, EIR 1 filing, Resource Report 2 question 3, Accession No. 2026013-5147.

⁶⁵ Mountain Valley April 1, 2026 supplemental filing, Redacted Biological Assessment, section 1.3.1.6, FERC Accession No. 20260401-5295; Mountain Valley June 26, 2026, supplemental filing, Smooth Coneflower Botanical Survey for Swann CS, FERC Accession No. 20260626-5111.

TABLE B.5-1

Federally Threatened and Endangered Species Potentially Occurring in the Project Area					
Species	Federal Status ^a	State Status ^a	Project Component of Potential Occurrence	Habitat Description and Potential Effects	Determination and Rationale ^b
Indiana bat (<i>Myotis sodalist</i>)	E	NL	All Project components	Caves and cave-like structures provide overwintering habitat. Suitable summer habitat consists of trees with a diameter at breast height of over 3 inches. Summer habitat also includes human-made structures. In 2015 and 2016, Mountain Valley conducted mist-net surveys along the Mountain Valley Mainline project route. Results of the survey indicated that no known Indiana bat summer occurrence records are within the Project area or within 2.5 miles. Methods were consistent with the FWS 2015 Range-Wide Indiana Bat Summer Survey Guidelines (FWS, 2015). There is suitable habitat within the Project area. Potential effects may occur on species due to tree clearing, lighting, dust, and noise from the proposed Project.	NLAA. Permanent lighting would be shielded downward facing. Mountain Valley would follow avoidance and mitigation measures listed in its Biological Assessment. Tree clearing would occur during winter season outside of active season for rearing, roosting, and foraging bats.
northern long-eared bat (<i>Myotis septentrionalis</i>)	E	NL	All Project components	Caves and cave-like structures provide overwintering habitat. Suitable summer habitat consists of trees with a diameter at breast height of over 3 inches. Summer habitat also includes human-made structures. Mist net surveys, conducted in late June – early July 2026, noted the presence of breeding females and occupied roost trees; a maternity colony is estimated to be within 0.5 mile of Bradshaw CS. Bats were not observed at Harris or Stallworth CS sites. No bats were captured during mist nest surveys at Swann CS in June 2026, suggesting that migration occurrence is not likely in those locations. There is suitable habitat within the Project area. Potential effects may occur on species due to tree clearing, lighting, dust, and noise from proposed Project.	NLAA. Permanent lighting would be shielded downward facing. Mountain Valley would follow avoidance and mitigation measures listed in its Biological Assessment. Tree clearing would occur during winter season outside of active season for rearing, roosting, and foraging bats.
tricolored bat (<i>Perimyotis subflavus</i>)	PE	E (VA)	Bradshaw CS, Harris CS, Swann CS	Habitat for the tricolored bat includes foliage of trees and human-made structures such as cracks and crevices of bridges and culverts. There were no tricolored bat captures within 3.0 miles of the Bradshaw, Harris, or Swann CS sites. Tricolored bat hibernacula occurrence information was obtained for the Mountain Valley Mainline project in 2022 (Mountain Valley, 2022). Eleven known occupied tricolored bat hibernacula were identified in West Virginia and Virginia, all of which are located more than 3 miles from the Project area. There is suitable habitat within the Project area. Potential effects may occur on species due to tree clearing, lighting, dust, and noise from proposed Project.	NLJCE. Permanent lighting would be shielded downward facing. Mountain Valley would follow avoidance and mitigation measures listed in its Biological Assessment, including proposing winter clearing to minimize effects during active season for rearing, roosting, and foraging bats.

TABLE B.5-1

Federally Threatened and Endangered Species Potentially Occurring in the Project Area

Species	Federal Status ^a	State Status ^a	Project Component of Potential Occurrence	Habitat Description and Potential Effects	Determination and Rationale ^b
monarch butterfly (<i>Danaus plexippus</i>)	PT	NL	All Project components	The monarch butterfly requires a diversity of blooming nectar plants on which they forage during migration and while on their summer breeding grounds (spring through fall; FWS, 2024). Monarchs lay eggs on a variety of milkweed plant species (<i>Asclepias</i> spp.), and larva feed exclusively on milkweed. Mountain Valley is assuming presence of the monarch butterfly within the Project area from March through October. The Project area is within the species' known range, and the characteristics of suitable foraging habitat are present. Thus, monarch butterflies are likely to occur in the Action Area. Potential effects may occur on species due to vegetative clearing, lighting, and noise from proposed Project.	NLJCE. Mountain Valley would implement and adhere to its construction BMPs and monarch butterfly mitigation measures, such as incorporating native milkweed into seed mixes when restoring disturbed areas, when feasible. Mountain Valley would conduct routine maintenance-related mowing and other routine vegetation management activities in areas where milkweed and/or nectar plants are present during time of the year when monarchs are not likely to be present (October 1–March 31). Mountain Valley would also attempt to apply herbicides only when flowers are not open.
Source: Developed based on information from Mountain Valley's April 1, 2026, supplemental filing, Redacted Biological Assessment, FERC Accession No. 20260401-5295. a T = Threatened, E = Endangered, PE = Proposed Endangered, PT = Proposed Threatened, NL = No listing, VA = Virginia, WV = West Virginia b NLAA = may affect, not likely to adversely affect; NLJCE = not likely to jeopardize the continued existence					

Mountain Valley would implement avoidance and minimization measures listed in its Biological Assessment for federally listed species and species proposed for listing. In June 2026, Mountain Valley conducted mist net bat surveys for the Swann Compressor Station, and no bats were captured, indicating probable absence of any federally listed bat species. Therefore, Mountain Valley would no longer follow seasonal time-of-year restrictions for clearing during construction.^{66,67} Mountain Valley would follow the avoidance and minimization measures summarized in the Biological Assessment for the monarch butterfly, including the incorporation of native milkweed into seed mixes when restoring disturbed areas when feasible.⁶⁸

Mountain Valley conducted surveys and submitted reports for federally listed species to the FWS for areas that were under the Mountain Valley Mainline project. Informal consultation with the FWS regarding Project's effects on the northern long-eared bat and Indiana bat is ongoing. **Therefore, we recommend that any Commission Order approving the Project include a mandatory condition requiring that Mountain Valley not begin construction activities until ESA consultation is complete** (see section D, recommended condition no. 12).

State-Listed Species

On August 1, 2025, Mountain Valley requested information from the West Virginia Department of Natural Resources (WVDNR) to identify potential effects on protected species in the vicinity of the Project. At this time, no records of rare, threatened, and endangered species or sensitive habitats occurring within the Project area have been provided. West Virginia does not have state threatened or endangered species legislation. Effects on wildlife in the area are discussed in greater detail in section B.5.2. On September 5, 2025, the VDCR noted that although smooth coneflower has the potential to occur based on a predictive model identifying potential habitat, it does not recommend surveys as warranted for the Project and identified several state-listed aquatic and bat species in the broader vicinity of the Project. The Project would not perform earth disturbance or in-stream work within or directly adjacent to suitable habitat for aquatic species; therefore, effects from the Project on these species are not anticipated. On December 19, 2025, the VDCR concluded that Project activities would not affect any documented state-listed plants or insects. State-listed species with the potential to occur in the vicinity of the Project in Virginia are summarized in table B7 in appendix B. The VDCR did not identify any State Natural Area Preserves or other sensitive or rare plant communities in the vicinity of the Project. On April 22, 2026, the Virginia Department of Wildlife Resources (VDWR) concluded the Project would have no adverse effects on state-listed aquatic species and provided general habitat and wildlife protection recommendations. On June 15, 2026, Mountain Valley submitted supplemental information to the VDWR on the proposed

⁶⁶ Mountain Valley April 1, 2026 supplemental filing, Redacted Biological Assessment, section 1.3.1.6, FERC Accession No. 20260401-5295; Mountain Valley June 26, 2026, supplemental filing, Resource Report 3, FERC Accession No. 20260626-5111.

⁶⁷ Northern long-eared bats and occupied roost trees were detected at Bradshaw Compressor Station. No tree-clearing is proposed at Bradshaw CS. Mountain Valley July 21, 2026 supplemental filing, MVP Boost Mist Net Report; FERC Accession No. 20260721-5064_PRIV.

⁶⁸ Mountain Valley April 1, 2026 supplemental filing, Redacted Biological Assessment, section 2.5.3, FERC Accession No. 20260401-5295.

ATWS and mist nest survey results. On July 22, 2026, the VDWR concurred with the results of the surveys. The VDWR continues to recommend implementation of BMPs, including using fully shielded, full cut-off lighting fixtures and directing temporary lighting away from forested areas and other suitable habitat.

To minimize or avoid effects on the state-listed species that have the potential to occur in the Project area, Mountain Valley would implement the measures in its E&SCP as well as habitat and species-specific measures recommended by state agencies.⁶⁹ Given the nature of the habitats within the Project area and the avoidance and minimization measures that Mountain Valley would implement as part of the Project, we conclude that effects on state-listed species would not be significant.

B.6. Cultural Resources

Section 106 of the NHPA, as amended, requires FERC to consider the effects of its undertakings on historic properties listed in, or eligible for listing in, the National Register of Historic Places (NRHP),⁷⁰ and to afford the Advisory Council on Historic Preservation an opportunity to comment. Mountain Valley, as a non-federal party, is assisting FERC in meeting our obligations under section 106 and its implementing regulations at 36 CFR 800. The SHPO coordinates the section 106 consultation process at the state level. The West Virginia Department of Arts, Culture and History represents West Virginia, and the Virginia Department of Historic Resources represents Virginia in this process.

B.6.1 Area of Potential Effects

The area of potential effects (APE) is the “geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist” (36 CFR 800.16(d)). The direct APE includes all areas where ground disturbing activities may take place. The indirect APE refers to areas where character-defining features of an applicable property’s significance could be potentially affected by the Project through visual, auditory, or physical means. For the Project, the direct APE includes three existing compressor stations, the proposed Swann CS, laydown yards, and access roads; the indirect APE is defined as a 0.5-mile radius around each compressor station footprint.

We received a comment that the Project is 1 mile from 14 precontact sites and 5 historic sites.⁷¹ Another commenter expressed concern regarding potential effects on the Coles-Terry Rural Historic District (RHD) and the Bent Mountain Apple Orchard RHD.⁷² The Coles-Terry

⁶⁹ Mountain Valley July 6, 2026 response to EIR 3 question 4 under Resource Report 3, FERC Accession No. 20260706-5190.

⁷⁰ In accordance with 36 CFR 800.16(l)(1), a historic property is any prehistoric or historic district, site, building, structure, object, or property of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization, included in, or eligible for inclusion in, the NRHP. This term includes artifacts, records, and remains that are related to and within such properties.

⁷¹ Deborah R. Kushner December 18, 2025 Comment on Filing, FERC Accession No. 20251218-5240.

⁷² Terry Family November 26, 2025 Comment on Filing, FERC Accession No. 20251126-5430.

RHD is approximately 3.4 miles south of the proposed Swann CS, and the Bent Mountain Apple Orchard RHD is approximately 5.4 miles south of the proposed Swann CS. The Coles-Terry RHD was assessed by the Virginia Department of Historic Resources to be ineligible for NRHP listing. The Bent Mountain Apple Orchard RHD was identified as eligible for NRHP listing under Criterion A (Settlement) and under Criterion C (Architecture). These resources are located beyond the limits of the direct and indirect APEs and would not be affected by Project activities. Results of cultural resources investigations and tribal consultation are described below.

B.6.2 Cultural Resources Investigations

Mountain Valley completed Phase I cultural resources investigations for the Project and provided the results to FERC and the West Virginia and Virginia SHPOs. The three existing compressor stations and laydown yards in West Virginia were previously surveyed for the Mountain Valley Mainline. Table B8 in appendix B includes cultural resources site summary and recommendations for the Project. The West Virginia SHPO concurred in a letter dated August 22, 2025, that no additional cultural resource surveys were warranted for the direct or indirect APEs and no historic properties would be affected by the Project.⁷³ We agree.

In Virginia, the proposed Swann CS direct APE totaled 43 acres;⁷⁴ however, the laydown yard and access road were previously surveyed for the Mountain Valley Mainline and were not reinvestigated for the Project. The remainder of the direct APE was surveyed, and no archaeological sites were encountered. Within the indirect APE, four resources would likely have an unobstructed view of the Project.⁷⁵ Of these, only the Norfolk and Southern Railroad Corridor No. 1 (DHR ID#060-5170) has potential for NRHP listing. In a letter dated December 23, 2025, the Virginia SHPO concurred that the Project would have no adverse effect on historic properties.⁷⁶ We agree.

B.6.3 Tribal Consultation

On August 8, 2025, Mountain Valley contacted eight federally recognized Native American tribes, providing a Project description and mapping of the Project. Table B9 in appendix B lists the tribes contacted. The Notice of Scoping was sent on November 19, 2025, and the *Notice of Schedule for the Preparation of an Environmental Assessment for the Mountain Valley Pipeline Boost Project* was circulated on January 14, 2026. On February 12, 2026, FERC sent letters to eight federally recognized tribes (table B9 in appendix B) to introduce the Project and request comments regarding the potential for the Project to affect resources of tribal concern. To date, no comments have been received.

⁷³ Mountain Valley October 23, 2025 Application, Resource Report 4 appendix 4-A, FERC Accession No. 20251023-5112.

⁷⁴ Mountain Valley October 23, 2025 Application, Resource Report 4 at 4.1, FERC Accession No. 20251023-5112.

⁷⁵ Mountain Valley October 23, 2025 Application, Resource Report 4, FERC Accession No. 20251023-5112.

⁷⁶ Virginia SHPO December 23, 2025 Comment on Filing, FERC Accession No. 20251223-5212.

B.6.4 Unanticipated Discoveries Plan

Mountain Valley developed a *Plan for Unanticipated Historic Properties and Human Remains, West Virginia and Virginia* and submitted it to FERC. The plan outlines the procedures to follow if unanticipated cultural resources or human remains are discovered during construction of the Project, including consultation with FERC, the SHPOs, and tribes regarding discoveries. We requested revisions. Mountain Valley provided a revised plan, which we find acceptable.

B.6.5 Compliance with the National Historic Preservation Act

Based on the results of the cultural resources investigations and comments from the West Virginia and Virginia SHPOs, we find that the Project would have no adverse effect on historic properties. FERC's compliance requirements with section 106 of the NHPA for the Project have been completed.

B.7. Land Use, Recreation, and Visual Resources

Land uses crossed by the Project include open land, agricultural land, forest/woodland, and developed land (table B.7-1). Mountain Valley did not identify any certified organic farms that would be affected by the Project (USDA, 2025). To support construction, Mountain Valley would use four laydown yards (21.6 acres⁷⁷ total). The Bradshaw CS Laydown Yard is currently in use and would not require modifications. Contiguous Harris CS laydown yards MVP-CY-002 and MVP-CY-002A and the Swann CS Laydown Yard were previously used as laydown yards and workspace for Mountain Valley Mainline construction. These areas were previously restored and would require vegetation clearing and placement of stone prior to Project activities. Project use of contractor yards would be temporary, with areas restored as necessary. These yards could revert to pre-construction land uses upon Project completion. Table B.7-1 describes the land uses crossed by the Project, the total acreage that would be disturbed during construction, and the portion of that total acreage that would be permanently maintained for Project operation. A commenter had concerns about the effects that converting agricultural land to industrial land would have on surrounding land uses and features such as Elliston Volunteer Fire Department, Eastern Montgomery High School, EastMont Community Garden, and Eastern Montgomery Park.⁷⁸ Effects on land use and recreation are discussed below, and effects on public services are addressed in section B.8.2.

⁷⁷ Mountain Valley March 20, 2026 Supplemental Response, revised table 1.3-1, FERC Accession No. 20260320-5294.

⁷⁸ Pamela Turner December 19, 2025 Comment on Filing, FERC Accession No. 20251219-5376.

TABLE B.7-1

Land Uses Affected by Construction and Operation of the Project ^a										
Facility, County, State	Open Land ^b		Agricultural ^c		Forest/Woodland ^d		Developed Land ^e		Total ^f	
	Cons	Oper	Cons	Oper	Cons	Oper	Cons	Oper	Cons	Oper
Bradshaw CS, Wetzel, WV ^f	0.0	0.0	0.0	0.0	0.0	0.0	6.3	6.3	6.3	6.3
Harris CS, Braxton, WV ^f	<0.1	<0.1	0.0	0.0	0.0	0.0	5.6	5.6	5.6	5.6
Stallworth CS, Fayette, WV ^f	0.5	0.5	0.0	0.0	0.0	0.0	5.9	5.9	6.4	6.4
Swann CS, Montgomery, VA	5.8	5.8	4.4	3.6	12.6	12.6	2.3	1.8	25.1	23.8
Laydown Yards	1.5	0.0	13.2	0.0	0.0	0.0	6.9	0.0	21.6	0.0
Access Road Modifications ^g	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3
Project Total	7.8	6.3	17.6	3.6	12.6	12.6	27.3	19.9	65.3	42.1

Data Source: USGS National Land Cover Database (NLCD) data (USGS, 2023c).

Table Source: Mountain Valley March 20, 2026 Supplemental Response, revised table 8.1-2, FERC Accession No. 20260320-5294; Mountain Valley June 26, 2026 Supplemental Response, revised table 8.1-1, FERC Accession No. 20260626-5111.

a Based on the NLCD (USGS, 2023c) with modification to reflect land use changes since the mapping was published based on aerial photography and field investigations.

b Non-forested lands and scrub-shrub wetlands used for open space or pasture" (FERC, 2017b), including utility rights-of-way, open fields, vacant land, herbaceous and scrub uplands, non-forested lands, emergent wetland, scrub-shrub wetland, golf courses, and undeveloped municipal land.

c Cropland, orchards, vineyards, or hay fields" (FERC, 2017b).

d Wooded lands not being used for specific commercial purposes, including deciduous and coniferous types such as upland and wetland forests and pine plantations (FERC, 2017b). Forested land types are further described in Mountain Valley's Resource Report 3.

e Developed lands include industrial facilities, paved areas, landfills, mines, quarries, and utility facilities; transportation corridors; commercial areas; residential and planned residential developments; low-, medium-, and high-density residential neighborhoods; and residentially zoned areas that have been developed with uses other than residential.

f Minor discrepancies in subtotals/totals are due to rounding. Acreages represent total for the land use affected by construction and operation within the Project area.

g Mountain Valley April 20, 2026 response to EIR 2 question 2 under Resource Report 10, FERC Accession No. 20260420-5234.

Access to Project workspaces would primarily be from existing roads. At the proposed Swann CS, permanent access road modifications would affect about 0.3 acre⁷⁹ of land outside the station site, including 0.2 mile of road outside of the compressor station site that would be widened from the existing 16 to 20 feet to 25 feet.⁸⁰ Construction activities at the three existing compressor station sites in West Virginia would not require modifications to the existing permanent access roads.

We received comments expressing concerns about the effects of construction and operation of the Project on residential areas and businesses. Mountain Valley has not identified any planned residential or commercial areas within 0.25 mile of the Project, and there are no residential or commercial structures within 50 feet of the existing or proposed compressor station sites.

The portion of the Project in West Virginia would be in remote and heavily wooded areas within existing compressor station sites and laydown yards that were used for the construction of the Mountain Valley Mainline. Work at these sites would not affect residential or commercial areas. The proposed Swann CS in Montgomery County, Virginia, would be on undeveloped land, southeast of an industrially developed area and east of the South Fork Roanoke River. There are clustered residential developments about 1,000 feet west of the site on the west side of the river. Effects would be most perceptible during construction. Temporary effects would include construction noise and fugitive dust, as well as visual effects from construction equipment and vegetation removal. Mountain Valley would notify landowners of properties crossed or abutting the Project about planned construction activities at least 7 days prior to scheduled construction.

Based on this assessment, we conclude that effects of the Project on general land use, including residential areas and businesses, would not be significant.

B.7.1 Public Land, Recreation, and Special Use Areas

We received comments expressing concerns over the proximity of the Project to recreation areas and parks including Eastmont Community Garden, Wayside Park, Riverside Park, Camp Roanoke, Creed Fields Park, Huckleberry Trail, and Pandapas Pond.⁸¹ The Project would be more than 1 mile from these resources.

No federal or state lands, conservation lands, lands owned by non-governmental organizations, registered natural landmarks, wilderness areas designated under the Wilderness Act, or scenic byways were identified within 0.25 mile of the Project. Eastern Montgomery Park, owned by Montgomery County and operated by Montgomery County Parks and Recreation, is 740 feet from the proposed Swann CS. The park is separated from the Swann CS

⁷⁹ Mountain Valley April 20, 2026 response to EIR 2, revised table 1.3-3, FERC Accession No. 20260420-5234.

⁸⁰ *Id.*

⁸¹ See December 18, 2025 Comment on Filing, FERC Accession No. 20251218-5244; December 19, 2025 Comment on Filing, FERC Accession No. 20251219-5376; and December 19, 2025 Comment on Filing, FERC Accession No. 20251219-5089.

by U.S. Route 460/11 and the Norfolk and Southern Railway and is adjacent to the fire station, which is a noise-sensitive area (NSA) 1 for the Swann CS. Based on the analysis of operational noise (see section B.10.2), the compressor station may be audible in the park, but at levels below the FERC threshold for project effects. We conclude that effects on the park from construction and operation of the Project would not be significant. No other public, recreation, or conservation lands were identified near the Project area in Virginia, and none were identified in West Virginia.

Mountain Valley did not identify any USDA NRCS agricultural easements that would be affected by the Project based on review of the USGS Protected Areas Database of the U.S. (USGS, 2024). If NRCS easements are identified, Mountain Valley would work with landowners and local USDA Farm Service Agency and NRCS officials to develop restoration programs that would ensure that affected enrolled Conservation Reserve Program/Conservation Reserve Enhancement Program acreage would be eligible to continue participation in the program.

One place of worship (Moore's Chapel Baptist Church) was identified about 600 feet northeast of the Swann CS site. There is substantial vegetation, including dense areas of mature trees as well as a four-lane highway between the Swann CS site and the church. Mountain Valley has not identified any other privately owned or managed recreational or special use areas based on the USGS Protected Areas Database of the U.S. (USGS, 2024).

Given the distance of the Project to these areas, we conclude that Project construction and operation would not result in significant effects on public land, recreation, and special use areas.

B.7.2 Visual Resources

We received comments about visual effects of the Project.⁸² The Project would not be located within any federally, state, or locally designated scenic areas, such as National Wild and Scenic Rivers or scenic roads/highways. Temporary to short-term visual effects would occur during construction at all Project facilities and laydown yards due to large equipment, vehicles, dust, and clearing of vegetation. Construction activities at the laydown yards would be visible to neighbors and travelers on adjacent roads, but these effects would be temporary. The proposed modifications at the existing aboveground facilities would not change the existing visual character of these facilities.

Upgrades at the existing compressor station sites would occur mostly within the existing footprint of the sites. Small expansions would occur at the Harris and Stallworth CSs, but no vegetation clearing is expected, and modifications would not result in equipment heights greater than that previously certificated for the Mountain Valley Mainline. The areas around these sites are sparsely populated, and while the sites may be visible to residents and travelers on nearby roads, the view would be filtered by vegetation and topography. Operation of the modifications at the existing compressor stations would be expected to have no measurable visual effects.

⁸² November 26, 2025 Sierra Club comments, FERC Accession No. 20251126-5203.

The proposed Swann CS would include four new buildings, three turbine structures, and associated equipment. The tallest components would consist of three 55-foot-tall turbine stacks. Mountain Valley conducted a viewshed analysis using a study area of 3 miles because the tallest proposed structures would have negligible visibility from public areas beyond 3 miles away. The figure in appendix C depicts visibility of the site from visual resources and other publicly accessible places with aesthetic/scenic and/or cultural values. The compressor station would be visible from homes and neighborhoods about 0.2 to 0.5 mile to the north-northeast and from fields and scattered homes about 0.1 to 0.7 mile to the northeast.

We received comments expressing concern about the effect of the artificial lighting of the Swann CS on night sky conditions and nearby residents.⁸³ During construction, the standard work schedule would be during daylight hours, and fully shielded, “full cut-off” type lighting fixtures would be used to minimize effects from light in upland areas. These fixtures are designed to prevent upward light and maximize shielding, reducing unintended illumination of surrounding areas. During operation, permanent lighting would use fully shielded, full cut-off fixtures designed to direct light downward and eliminate direct upward light. Lighting would be limited to the minimum necessary to support safe operation, maintenance, and security of the facilities. Mountain Valley is not proposing to change the operational lighting features at the three existing compressor stations.⁸⁴

The Swann CS also would be visible along U.S. Route 460/11 and Campbell Drive about 0.1 to 1.5 miles away. U.S. Route 460/11 is a primary highway between Roanoke and Christiansburg, Virginia, that abuts the northern edge of the proposed Swann CS. Along this segment, travelers would experience varying degrees of visibility for about 90 seconds⁸⁵ as they approach the compressor station site, with the vertical turbine stacks being the most visible feature. This assessment is based on the posted speed limit of 55 miles per hour along U.S. Route 460/11 and the distance from which the compressor station would be visible. Vegetation and built features along the roadside would likely periodically screen the compressor station from view.

Based on this assessment, we conclude that effects of the Project on visual resources would not be significant.

B.8. Socioeconomics

Construction of the Project would have temporary and localized effects on the socioeconomic conditions in the Project vicinity based on the duration of construction activities and distribution of the temporary workforce in the Project area. These would include temporary changes in population levels or local demographics, increased employment opportunities, increased demand for housing and public services, transportation effects, and an increase in

⁸³ Craig County April 8, 2026, Motion to Intervene, FERC Accession No. 20260408-5060.

⁸⁴ Mountain Valley July 6, 2026 response to EIR 3 question 1 under Resource Report 3, FERC Accession No. 20260706-5190.

⁸⁵ Mountain Valley October 23, 2025 Application, Resource Report 8 at 8-23, FERC Accession No. 20251023-5112.

government revenue associated with sales, payroll, and property taxes. The socioeconomic study area consists of Wetzel, Braxton, and Fayette Counties in West Virginia, and Montgomery and Roanoke Counties in Virginia.

We received multiple comments regarding potential effects on environmental justice communities. Executive orders pertaining to environmental justice were revoked in January 2025. Executive Order 14148, 90 Federal Register 8337 (January 28, 2025), revoked Executive Orders 13985 and 14096; Executive Order 14173, 90 Federal Register 8633 (January 31, 2025), revoked Executive Order 12898. However, the Commission continues to fulfill its NEPA responsibilities by considering effects on all potentially affected communities.

B.8.1 Population and Housing

As indicated in table B.8-1, populations in the Project area range from 12,051 in Braxton County, West Virginia, where the existing Bradshaw CS is located, to 98,998 in Montgomery County, Virginia, where the proposed Swann CS would be constructed (U.S. Census Bureau, 2025).

TABLE B.8-1						
Population by State and County						
Geographic Area	2010	2020	2024	Population Change (%)		2024 Population Density
				2010 to 2020	2020 to 2024	
West Virginia	1,852,994	1,793,716	1,769,979	-3	-1	73.6
Wetzel	16,583	14,442	13,766	-13	-5	38.4
Braxton	14,523	12,447	12,051	-14	-3	23.6
Fayette	46,039	40,488	38,600	-12	-5	58.3
Virginia	8,001,024	8,631,393	8,811,195	8	2	223.2
Montgomery	94,392	99,721	98,998	6	-1	255.9
Roanoke	92,376	96,929	97,334	5	0	387.8
County Total	94,392	99,721	260,749	0	-1	120.3

Table Source: Mountain Valley October 23, 2025 Application, Resource Report 5 table 5.2-1, FERC Accession No. 20251023-5112.
Data Sources: U.S. Census Bureau, 2010, 2020e, 2024, 2025.

Construction of the Project is estimated to begin in winter 2026–2027 and be completed in 2028. Mountain Valley anticipates a peak construction workforce of 45 to 75 and an average construction workforce of 40 to 65, depending on the site.⁸⁶ About 17 to 18 percent of the workers would be local at the Harris, Stallworth, and Swann CSs, and about 82 to 83 percent would be non-local. The Bradshaw CS would have 44 percent local and 56 percent non-local workforces. A breakdown of workers by facility is provided in table B.8-2. During Project operations, staffing at the existing compressor stations would not change, although one worker would be added to Mountain Valley staff in West Virginia. Mountain Valley would add one worker to its staff in Virginia.

⁸⁶ Mountain Valley April 20, 2026 response to EIR 2, revised table 5.3-1, FERC Accession No. 20260420-5234.

Temporary housing availability varies geographically in the counties near the proposed facilities and is available in the form of daily, weekly, and monthly rentals in motels, hotels, recreational vehicle spaces, and rental housing units. At peak, between 25 and 61 non-local construction workers, depending on the site, would need to find temporary housing in the Project area during construction. Some non-local workers would likely reside temporarily in the counties where they are working, and some may find housing in larger nearby communities. Housing characteristics for the counties in the socioeconomic study area are presented in table B10 in appendix B. The Project is likely to have a temporary positive effect through increased demand and higher rates of occupancy in these types of accommodations. Vacation homes are also available for rent in the analysis area counties, but these units are not included in the estimated housing units for rent and would continue to be available for recreationists and tourists, which should reduce the possible negative effect of workers on the rental and accommodation industry in the area. Given the rental vacancy rates and the number of hotels, motels, and other temporary housing available in the study area, sufficient housing exists in the Project area and Project effects on the local housing market would not be significant.

Effects on population resulting from construction of the Project would be temporary and minor given the expected workforce size relative to existing populations of the counties in the Project area. Due to the relatively short duration of Project construction, about 2 years, it is anticipated that few to no family members of workers would move to the Project area, thus minimizing temporary effects on the local populations. During Project operations, existing Mountain Valley staff would be primarily responsible for operations and maintenance of the facilities. Two new positions would be added to the existing Mountain Valley operations staff, one in West Virginia and one in Virginia. This would not be expected to affect local housing resources.

TABLE B.8-2

Estimated Workers by Project Facility

Facility	County, State	Local Peak Workforce	Non-Local Peak Workforce	Total Peak Workforce	Local Average Workforce	Non-Local Average Workforce	Total Average Workforce	Percent Local Workers	Percent Non-Local Workers	Operation ^a
Bradshaw CS	Wetzel, WV	20	25	45	18	22	40	44	56	4
Harris CS	Braxton, WV	10	50	60	8	37	45	17	83	4
Stallworth CS	Fayette, WV	10	50	60	8	37	45	17	83	4
Swann CS	Montgomery, VA	14	61	75	12	53	65	18	82	4
TOTAL		54	186	240	46	149	195	-	-	16

Source: Mountain Valley July 7, 2026 response to EIR 3, revised table 5.3-1, FERC Accession No.20260706-5190.

a Number of operation workers during construction.

B.8.2 Public Services

Public services and facilities in the study area include hospitals, law enforcement, fire departments, and schools. Table B.8-3 provides an overview of select public services available by county in the socioeconomic study area. Each county has at least one hospital or medical facility, its own sheriff's or police department, and numerous fire departments. Additionally, each county has at least one school district and multiple public schools for kindergarten through 12th grade. The counties in the study area have adequate infrastructure and services to meet the need of any non-local construction workers entering the study area.⁸⁷

TABLE B.8-3					
Available Public Services in the Project Area					
State/County	Hospitals	Number of Hospital Beds	Police Departments	Fire Departments	Public Schools
West Virginia					
Wetzel County	1	25	5	10	9
Braxton County	1	25	4	7	8
Fayette County	2	94	8	15	13
Virginia					
Montgomery County	2	238	5	5	22
Roanoke County	3	1,098	3	4	29
Sources: Mountain Valley October 23, 2025 Application, Resource Report 5 tables 5.2-4, table 5.2-5, and table 5.2-6, FERC Accession No. 20251023-5112.					

Depending on the site, at peak about 25 to 61 non-local workers⁸⁸ would be expected to travel to the study area to work on the Project, which is a negligible population increase given the expected workforce size relative to existing populations of the counties in the Project area. This would result in minor, temporary, or no effect on local community facilities and services, such as medical services, police, fire, and schools. Temporary effects on public services could include the need for localized police assistance to control traffic flow or respond to emergencies during construction activities. Also, construction-related injuries could occur as a result of unanticipated accidents or emergencies, and the Project could require police, fire, and emergency services. Mountain Valley would work with local services to coordinate effective emergency response during construction and operation of the Project. The anticipated demand on these services is not expected to exceed the existing capability of the services. Because most of the non-local workers would not travel with their families during the construction period, the Project would not increase demand for school-related services.

B.8.3 Economy, Employment, and Tax Revenue

We received comments about the effects of the Project on the local economy and household income levels; we address those here. Mountain Valley estimates that it would spend

⁸⁷ Mountain Valley October 23, 2025 Application, Resource Report 5 at 5-25 and 5-26, FERC Accession No. 20251023-5112.

⁸⁸ Mountain Valley April 20, 2026 response to EIR 2, revised table 5.3-1, FERC Accession No. 20260420-5234.

about \$65 million in West Virginia and \$35 million in Virginia on construction and commissioning, machinery, and services including easement payments in Virginia.⁸⁹

Mountain Valley estimates an average total construction workforce of about 195 workers, of which about 149 workers would be non-local and 46 workers would be local.⁹⁰ The non-local workforce would most likely spend a portion of their pay in local communities on items such as housing, food, automobile expenses, entertainment, and other items. The number of temporary, indirect jobs in the study area could increase as purchases for goods and services would increase along with the influx of the construction workforce to the area. Indirect employment, including hiring additional staff in the retail and service industries to accommodate the increase in demand for food, clothing, lodging, gasoline, and entertainment, along with an increased demand for goods and services, would have a temporary stimulating effect on local economies. Indirect jobs would represent a temporary, minor increase in employment opportunities in the study area.

Mountain Valley estimates that operations in West Virginia would support annual employment of 11 total direct, indirect, and induced jobs and \$1.0 million in labor income.⁹¹ In Virginia, Mountain Valley estimates operation would support annual employment of 9 total jobs and \$1.0 million in labor income.⁹² Wages and salaries for the two direct operations positions would be expected to be about \$134,120 per job.⁹³ Given the population of the counties, the size of the workforce both during construction and operation, and the duration of construction, we anticipate that the Project would have a temporary and negligible positive effect on unemployment rates in the Project area.

Construction of the Project would result in increased state and local sales tax revenues associated with the purchase of construction materials and other goods and services by the construction workforce. Local communities would benefit from taxes paid by Mountain Valley and generated by activity supported during construction. During engineering, procurement, and construction, Mountain Valley estimates about \$5.7 million in state and local taxes, including property tax, state income tax, and sales tax, would be generated in West Virginia and about \$3.4 million in Virginia.⁹⁴ Mountain Valley also estimates that the Project would generate about \$11.0 million dollars in federal taxes in West Virginia and \$6.0 million in Virginia during this time.⁹⁵ During operation, Mountain Valley estimates the Project would support annual state and local tax revenues, including ad valorem taxes, of \$18.3 million in West Virginia and

⁸⁹ Mountain Valley October 23, 2025 Application, Resource Report 5 at 5-21, FERC Accession No. 20251023-5112.

⁹⁰ Mountain Valley April 20, 2026 response to EIR 2, revised table 5.3-1, FERC Accession No. 20260420-5234.

⁹¹ Mountain Valley October 23, 2025 Application, Resource Report 5 at 5-24, FERC Accession No. 20251023-5112.

⁹² *Id.*

⁹³ *Id.*

⁹⁴ Mountain Valley October 23, 2025 Application, Resource Report 5 at 5-26, FERC Accession No. 20251023-5112.

⁹⁵ Mountain Valley October 23, 2025 Application, Resource Report 5, table 5.3-6, FERC Accession No. 20251023-5112.

\$12.3 million in Virginia.⁹⁶ Mountain Valley estimates the Project would support about \$2.4 million in federal tax revenue in West Virginia and \$1.0 million in Virginia during operation.⁹⁷

The increase in economic activity resulting from spending during construction would result in a temporary, positive economic effect in the Project area. The increased tax base during operations would have minor long-term beneficial effects on local governments in the Project area.

B.8.4 Transportation and Traffic

We received comments expressing concerns about the effect of the Project on traffic in local communities. Traffic associated with the delivery of materials and equipment to the Project sites would result in temporary increases in traffic and traffic congestion on the roads near the Project facilities for the duration of construction. Workers commuting to and from the work sites every day would result in a temporary increase in traffic during construction. Additionally, traffic flow could be temporarily interrupted when construction equipment crosses roadways. Mountain Valley would minimize effects by implementing measures in its Traffic and Transportation Management Plan to maintain safety and minimize traffic disruption and ensure that construction activities would not prevent the passage of emergency vehicles. Additionally, speed limits would be strictly controlled for construction equipment and associated vehicles. Mountain Valley would obtain all necessary permits from the West Virginia and Virginia Departments of Transportation and local permits for construction vehicle use of public roadways.

Primary access to each aboveground facility would be through use of existing public interstate highways (I) including I-77, I-79, I-64, and I-81. Local roads used to access each site include:

- Existing Bradshaw CS: access via Fallen Timber Road and Bear Run Road. Access to Fallen Timber Road is via State Route (SR) 20 (Shortline Highway), which is a two-lane highway.
- Existing Harris CS: access via County Route (CR) 24/5 (Milroy Road), which is a gravel road. Access to CR 24/5 is via CR 23 (Vernon Road), which is paved.
- Existing Stallworth CS: access via CR 29 (Springdale Road). CR 29 is a paved, two-lane county route.
- Proposed Swann CS: access via U.S. Route 460/11, a four-lane highway. I-81 passes about 1 mile north of the proposed compressor station site.

Mountain Valley estimates an average of about 75 daily round trips, peaking at about 100 trips, for site worker commutes and construction-related deliveries at each of the existing facilities, and an average of about 95 daily round trips, peaking at about 120 trips, at the Swann

⁹⁶ Mountain Valley October 23, 2025 Application, Resource Report 5 table 5.3-7, FERC Accession No. 20251023-5112.

⁹⁷ *Id.*

CS site during construction.⁹⁸ These numbers could change as construction requirements evolve throughout the construction process. Based on this analysis, construction of the Project would result in a slight decrease in traffic capacities on the Project area roadways during construction but is not expected to affect capacity or level of service during operation.⁹⁹ Given the relatively few trips expected, we find that these roadways have sufficient capacity to support the anticipated Project use during construction.

B.8.5 Property Values

We received comments expressing concern about adverse effects on property values. While most of the Project area is within Mountain Valley ownership or existing permanent right-of-way, some land rights may be required for laydown yards and temporary workspace. The easement acquisition process provides compensation to the landowner for the right to use the property. Appraisal methods used to value land are typically based on objective characteristics of the property and any improvements. Subjective valuation is generally not considered in appraisals. Each potential purchaser has different criteria and differing capabilities to purchase land.

A number of studies have been conducted since the early 1990s on the effects of proximity to pipelines on property values. Overall, the studies conclude that pipelines and “well designed and operated compressor stations on larger sites with adequate buffers” minimally affect surrounding land uses and residential property values (Foster, 2016). We recognize that property value comparisons from different locations are not holistic of potential effects on property values and may not have direct applicability to the Project area. The Project is not introducing an easement to most of the parcels affected, though one permanent easement for the new suction and discharge facilities will be acquired as well as land rights to areas to be used temporarily during construction. Based on the research we have reviewed, we do not anticipate a significant negative effect on property values.

B.9. Air Quality

The term “air quality” refers to relative concentrations of pollutants in the ambient air. Air quality would be affected by construction and operation of the Project. Federal and state air quality standards are designed to protect human health and public welfare. The EPA has developed National Ambient Air Quality Standards (NAAQS)¹⁰⁰ for criteria air pollutants, including nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), ozone (O₃), lead, and inhalable particulate matter (PM_{2.5} and PM₁₀). PM_{2.5} includes particles with an aerodynamic diameter less than or equal to 2.5 micrometers, and PM₁₀ includes particles with an aerodynamic diameter less than or equal to 10 micrometers. Volatile organic compounds (VOC) are regulated by the EPA primarily to prevent the formation of O₃, a constituent of photochemical smog.

⁹⁸ Mountain Valley February 13, 2026 response to EIR 1 question 1 under Resource Report 5, FERC Accession No. 20260213-5147.

⁹⁹ Mountain Valley February 13, 2026 response to EIR 1 question 2 under Resource Report 5, FERC Accession No. 20260213-5147.

¹⁰⁰ The current NAAQS are listed on the EPA’s website at <https://www.epa.gov/criteria-air-pollutants/naaqs-table>.

Many VOCs form ground-level O₃ by reacting with sources of oxygen molecules such as nitrogen oxides (NO_x) in the atmosphere in the presence of sunlight. NO_x and VOCs are referred to as O₃ precursors. Hazardous air pollutants (HAP) are also emitted during fossil fuel combustion and are known to cause cancer and other serious health effects.

The term “greenhouse gas” (GHG) refers to the gases and aerosols that occur in the atmosphere both naturally and as a result of human activities, such as the burning of fossil fuels. GHGs produced by fossil-fuel combustion are primarily carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). GHGs’ status as a pollutant is not related to toxicity because they are non-hazardous to health at normal ambient concentrations. Construction activities would result in minor and temporary GHG emissions associated with construction equipment and vehicle exhaust. Operational activities would result in long-term GHG emissions from natural gas combustion turbines and fugitive CH₄ emissions. Emissions of GHGs are typically quantified and regulated in units of carbon dioxide equivalents (CO₂e). The CO₂e takes into account the global warming potential (GWP) of each GHG. The GWP is the measure of a particular GHG’s ability to absorb solar radiation as well as its residence time within the atmosphere.¹⁰¹

Fugitive dust is a mix of PM_{2.5}, PM₁₀, and larger particles that are dispersed into the air by moving vehicles, construction equipment, earth movement, and/or wind erosion. Fugitive CH₄ emissions are unintentional releases of CH₄ and other VOCs from leaks in natural gas equipment.

Existing air quality in the Project area as well as federal and state air quality and permitting requirements are detailed in appendix D.

B.9.1 Construction Emissions

The Project would result in air quality effects associated with construction, including emissions from fossil-fueled construction equipment and fugitive dust. Emissions from construction equipment would depend on the duration, number, and type of vehicles and equipment. Section A.6 provides details regarding the construction schedule. As described in section B.7, the existing compressor station sites are in generally remote areas away from residential areas. The proposed Swann CS is about 1,000 feet from a residential area. Mountain Valley would avoid idling of construction equipment to the extent possible and follow manufacturer recommendations regarding good combustion practices for maximizing fuel efficiency and minimizing engine emissions.

Fugitive dust emissions would result from vehicular traffic and soil disruption associated with land clearing, grading, excavation, and backfilling. Mountain Valley would implement the following measures to control dust during construction:

- follow construction sequencing and disturb limited areas at a time;

¹⁰¹ CO₂ has a GWP of 1, CH₄ has a GWP of 28, and N₂O has a GWP of 265. See table A-1 of 40 CFR 98. These GWPs are based on a 100-year period. We have selected their use over other published GWPs for other timeframes because these are the GWPs the EPA has established for reporting of GHG emissions and air permitting requirements. This allows for a consistent comparison with these regulatory requirements.

- use wet suppression as necessary;
- control fugitive dust emissions from paved roads with a combination of water trucks, power washers, sweeping, and/or vacuuming;
- control track out of loose materials by using rock construction entrances on access roads that begin at a junction with paved roads; and
- conduct daily inspection of dust control measures when environmental conditions are dry.

Mountain Valley does not anticipate the use of open burning to dispose of cleared vegetation.

Mountain Valley's estimated Project construction emissions are summarized in table B.9-1 for 2027 and 2028.

TABLE B.9-1								
Estimated Construction Emissions from the Project – 2027 and 2028								
Source	Construction Emissions (tons per year)							Total HAPs
	NO _x	CO	SO ₂	VOC	PM ₁₀	PM _{2.5}	CO ₂ e	
2027								
Bradshaw CS Wetzel County, WV	23.16	12.04	0.02	2.43	77.63	9.12	7,281.72	0.95
Harris CS Braxton County, WV	23.13	12.02	0.02	2.43	74.83	8.84	7,273.87	0.95
Stallworth CS Fayette County, WV	23.19	12.13	0.02	2.44	80.62	9.44	7,616.36	0.96
Swann CS Montgomery County, VA ^a	41.45	27.60	0.04	5.18	148.50	17.59	14,780.70	1.92
2027 Total	110.92	63.80	0.11	12.49	381.58	44.99	36,952.65	4.78
2028								
Bradshaw CS Wetzel County, WV	34.42	17.99	0.03	3.70	78.41	9.87	10,399.38	1.48
Harris CS Braxton County, WV	34.39	17.97	0.03	3.71	75.60	9.59	10,391.64	1.48
Stallworth CS Fayette County, WV	33.99	17.25	0.03	3.64	81.37	10.16	10,173.50	1.48
Swann CS Montgomery County, VA ^a	40.40	20.92	0.04	4.45	97.81	12.22	12,201.73	1.75
2028 Total	143.20	74.12	0.13	15.49	333.18	41.85	43,166.25	6.20
Sources: Mountain Valley February 13, 2026 response to EIR 1 attachment 9, tables 9.1-1 and 9.1-2, FERC Accession No. 20260213-5147; Mountain Valley April 20, 2026 response to EIR 2 attachment 9-3a, tables 9.1-11 and 9.1-12, FERC Accession No. 20260420-5234.								
Note: The numbers in this table have been rounded. Therefore, the total may not reflect the sum of the addends.								
^a Includes suction and discharge facility.								

As indicated in appendix D, section D.2.3, the proposed facilities for the Project are in areas designated as attainment with the NAAQS for all criteria pollutants. Therefore, the Project is not subject to General Conformity and does not require a General Conformity Determination.

Given the temporary and intermittent nature of construction, we find that emissions from Project construction activities would not be expected to violate any applicable ambient air quality standard or significantly affect air quality.

B.9.2 Operational Emissions

Appendix D, section D.2 describes the emissions-generating equipment that would be installed at each compressor station. At the existing Bradshaw CS, Mountain Valley would add one Solar Titan 130E gas-fired turbine rated at 23,483 hp; a gas-fired microturbine (generator); a gas-fired fuel gas heater; and associated piping, fugitive components,¹⁰² and equipment. At the existing Harris CS, Mountain Valley would add one Solar Titan 350 gas-fired turbine rated at 56,590 hp; a gas-fired fuel gas heater; four gas-fired microturbines (generator); and associated piping, fugitive components, and equipment. At the existing Stallworth CS, Mountain Valley would upgrade the two existing Solar Titan 130 natural gas-fired turbines and add two Solar Titan 130E natural gas-fired turbines for a combined total of approximately 52,880 additional hp compression; add three gas-fired microturbines (generators); add one natural gas-fired fuel gas heater; and add associated piping, fugitive components, and equipment.

At the proposed Swann CS, Mountain Valley would install two Solar Titan 350 gas-fired turbines, each rated at 56,834 hp; one Solar Titan 250 gas-fired turbine rated at 32,493 hp; 15 gas-fired microturbines (generators), three gas-fired fuel gas heaters; two storage tanks (one for produced fluids and one for oil) with capacities less than 15,000 gallons; and associated piping, fugitive components, and equipment.

This gas-fired equipment would produce emissions in addition to natural gas venting and fugitive emissions. Additional sources of operational emissions for the Project include fugitive emissions associated with pigging and blowdown¹⁰³ operations at the compressor stations. Mountain Valley implements measures to reduce fugitive emissions from its natural gas operations, such as employing a leak detection and repair program consistent with requirements in New Source Performance Standards Subpart OOOOb and compressor measurement and repair/replacement requirements in this rule. Additional fugitive emissions reduction practices would include monitoring fugitive components on a periodic schedule with optical gas imaging devices and making repairs for identified sources of fugitive emissions. Applicable New Source Performance Standards requirements are discussed in greater detail in appendix D.

The new compressor turbines proposed for each compressor station would use combustion technology designed to reduce NO_x emissions. Each of the turbines would be equipped with Solar's SoLoNO_x technology to reduce NO_x and CO emissions. The turbine at the Bradshaw CS would be equipped with an oxidation catalyst. The turbines at the Swann CS would be equipped with both selective catalytic reduction and oxidation catalysts. Emissions from the operation of these four compressor stations are summarized in table B.9-2. The

¹⁰² Fugitive components consist of connectors, flanges, open-ended lines, pump seals, valves, and other miscellaneous components such as compressor seals, relief valves, diaphragms, drains, and meters that can generate fugitive emissions.

¹⁰³ A blowdown is when natural gas is vented to the atmosphere to clear the pipeline or equipment of natural gas, usually during abandonment or maintenance activities, to ensure safe operations.

resulting annual operational emissions indicate each compressor station would not be subject to Prevention of Significant Deterioration permitting because potential emissions would be below the 250 tons per year for each criteria pollutant. Additional air construction and operational permitting requirements for this Project are discussed in appendix D.

TABLE B.9-2								
Operations Emissions Summary (tons per year) ^a								
Facility	VOC	NO _x	CO	SO ₂	PM _{2.5} / PM ₁₀	CO ₂ e	HCHO	Total HAPs
Bradshaw CS								
Existing	40.46	177.69	197.28	10.97	47.42	427,797	8.99	10.06
Proposed	5.32	26.89	6.97	2.67	7.85	101,159	0.45	0.72
Total	45.78	204.57	204.25	13.64	55.27	528,957	9.44	10.77
Harris CS								
Existing	20.40	86.25	96.65	4.95	21.35	201,062	3.97	4.53
Proposed	10.40	58.17	61.77	5.83	17.05	211,113	4.85	5.41
Total	30.79	144.42	158.42	10.78	38.4	412,175	8.82	9.94
Stallworth CS								
Existing	19.75	79.26	90.79	4.74	20.26	190,260	3.79	4.27
Proposed	10.13	26.13	24.45	5.74	10.37	215,316	4.80	5.35
Total	29.88	105.39	115.24	10.48	30.63	405,576	8.59	9.62
Swann CS								
Existing	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Proposed	22.72	54.99	46.57	15.21	44.36	555,597	2.60	4.06
Total	22.72	54.99	46.57	15.21	44.36	555,597	2.60	4.06
Project-Wide Emissions								
Existing	80.61	343.2	384.72	20.66	89.03	819,119	16.75	18.86
Proposed	48.57	166.18	139.76	29.45	79.63	1,083,185	12.7	15.54
Grand Total	129.18	509.38	524.48	50.11	168.66	1,902,304	29.45	34.4

Source: Mountain Valley October 23, 2025 Application, Resource Report 9 table 9.1-13, FERC Accession No. 20251023-5112.
Note: The numbers in this table have been rounded. Therefore, the total may not reflect the sum of the addends.
^a For the existing Bradshaw, Harris, and Stallworth CSs, the emissions during operation include the existing emissions units, the proposed new emission units, and the total emissions for the existing source following completion of the Project.

B.9.3 Dispersion Modeling Analysis

Air dispersion modeling was performed for each compressor station using the EPA's AERMOD dispersion model (Version 24142). Ambient background concentrations were obtained from the EPA's air quality monitoring network for years 2023 through 2025.¹⁰⁴ The monitoring data chosen were determined to be representative based on several criteria, including their distance to the facility, surrounding land cover, and data availability. Meteorological data were obtained from meteorological stations selected as representative based on their proximity to the Project sites and with similar land cover. Secondary PM_{2.5} and O₃ formation in the atmosphere due to complex physical and chemical mechanisms were accounted for in the

¹⁰⁴ Any existing contributions to ambient air quality from existing emissions sources in the region are considered represented by the measured background air quality data.

modeling following EPA guidance. Emissions source input data for the compressor stations (including combustion turbines, microturbines, and fuel gas heaters) in the analyses were based on manufacturer specifications and engineering estimates.

A source impact analysis is a preliminary modeling analysis to determine whether the allowable emissions from a project would result in a violation of the NAAQS. Significant Impact Levels (SIL) are used to determine if the effect of a project warrants further review. Generally, if a project is below the SIL for a pollutant and averaging period, further analysis is not required. As a conservative approach, Mountain Valley modeled the applicable pollutants for the existing sources and Project sources, added ambient background concentrations, and compared the predicted results against the NAAQS, regardless of whether the initial results from just the Project exceeded the SIL.

Results of SIL analysis are shown in table B.9-3. The SILs are used to determine if a project warrants further review based on the pollutant and averaging period. Results of the modeling analyses for the Bradshaw CS, Harris CS, Stallworth CS, and Swann CS are shown in table B.9-4 for all required pollutants and averaging periods.

Numerous commenters expressed concern with public health effects resulting from Project air emissions and the ability for residents to monitor air quality. We also received comments regarding the air permit process and associated community engagement for the proposed Swann CS.¹⁰⁵ As indicated in each table, Project emissions would be less than the NAAQS, which were established to protect human health (including sensitive subpopulations such as children or those with chronic illnesses) and public welfare. Additionally, air permit modifications were issued by the WVDEP for the proposed modifications to all three existing compressor stations. An air permit application was submitted to the VDEQ for the construction/operation of the Swann CS; however, as of the date of this EA, a permit has not yet been issued. Mountain Valley states it is working to resolve the issues delaying VDEQ permit approval and has gone beyond regulatory requirements in efforts to engage the community around the proposed Swann CS.¹⁰⁶

Given that Project air emissions would not exceed the NAAQS and that Mountain Valley would need to comply with federal and state air permitting requirements, we conclude that operation of the Project would not have significant effects on air quality.

¹⁰⁵ POWHR June 26, 2026 Comment on Filing, FERC Accession No. 20260626-5070.

¹⁰⁶ Mountain Valley July 10, 2026 response to Comment on Filing, FERC Accession No. 20260710-5116.

TABLE B.9-3

Summary of Significant Impact Level Analysis Modeling Results

Pollutant	Averaging Period	Facility Total: Existing and Project Sources (µg/m³)	Project Sources (µg/m³)	SIL (µg/m³)	Project Impacts Above the SIL?	Radius of Impact (km)
Bradshaw CS						
NO ₂	1-hr	83.37	21.78	7.5	Yes	2.19
	Annual	3.57	0.54	1	No	---
PM ₁₀	24-hr	11.72	1.07	5	No	---
PM _{2.5} ^a	24-hr	11.72	0.74	1.2	No	---
	Annual	0.71	0.07	0.13	No	---
CO	1-hr	233.20	22.07	2,000	No	---
	8-hr	173.36	12.56	500	No	---
SO ₂	1-hr	8.24	2.53	7.8	No	---
O ₃ ^a	8-hr	0.75 ppb		1 ppb	No	---
Harris CS						
NO ₂	1-hr	86.36	28.35	7.5	Yes	20.99
	Annual	3.01	0.90	1	No	---
PM ₁₀	24-hr	6.62	1.16	5	No	---
PM _{2.5} ^a	24-hr	4.60	0.89	1.2	No	---
	Annual	0.43	0.12	0.13	No	---
CO	1-hr	154.75	51.36	2,000	No	---
	8-hr	79.21	22.91	500	No	---
SO ₂	1-hr	4.41	1.47	7.8	No	---
O ₃ ^a	8-hr	0.75 ppb		1 ppb	No	---
Stallworth CS						
NO ₂	1-hr	129.07	38.64	7.5	Yes	13.50
	Annual	7.64	2.18	1	Yes	0.46
PM ₁₀	24-hr	9.81	6.37	5	Yes	0.28
PM _{2.5} ^a	24-hr	7.45	4.27	1.2	Yes	1.46
	Annual	0.71	0.21	0.13	Yes	0.64
CO	1-hr	157.50	79.28	2,000	No	---
	8-hr	85.83	49.87	500	No	---
SO ₂	1-hr	5.66	3.88	7.8	No	---
O ₃ ^a	8-hr	0.39 ppb		1 ppb	No	---
Swann CS						
Maximum Project Impact (100% Load)						
NO ₂	1-hr	68.98		7.5	Yes	4.75
	Annual	5.04		1	Yes	0.49
PM ₁₀	24-hr	9.33		5	Yes	0.36
PM _{2.5} ^a	24-hr	8.31		1.2	Yes	2.48
	Annual	0.87		0.13	Yes	2.97
CO	1-hr	213.02		2,000	No	---
	8-hr	186.20		500	No	---
SO ₂	1-hr	9.28		7.8	Yes	1.20
O ₃ ^a	8-hr	0.20 ppb		1 ppb	No	---
Sources: Mountain Valley February 13, 2026 response to EIR 1 Attachment 9-7, table 2-2, FERC Accession No. 20260213-5147; Mountain Valley October 23, 2025 Application, Resource Report 9, Appendix A table 2-4, FERC Accession No. 20251023-5112.						
a Includes maximum modeled impact and estimated secondary impacts from precursor pollutants for PM _{2.5} and O ₃ .						

TABLE B.9-4

Summary of Modeling Results, National Ambient Air Quality Standards							
Pollutant	Averaging Period	Background (µg/m³)	Existing Sources (µg/m³)	Project Sources (µg/m³)	Total (Background + Existing + Project) ^a (µg/m³)	Primary NAAQS (µg/m³)	Below NAAQS?
Bradshaw CS							
NO ₂	1-hr	60.2	51.53	14.24	125.97	188	Yes
	Annual	13.43	3.03	0.54	17.00	100	Yes
PM ₁₀	24-hr	48.0	4.65	0.36	53.01	150	Yes
PM _{2.5}	24-hr	16.83	3.22	0.28	20.33	35	Yes
	Annual	6.80	0.64	0.07	7.51	9	Yes
CO	1-hr	11,796	194.14	20.16	12,010	40,000	Yes
	8-hr	5,726	148.99	12.15	5,887	10,000	Yes
SO ₂	1-hr	21.81	5.93	0.66	28.40	196	Yes
O ₃	8-hr	64.3 ppb	0.75 ppb		65.05 ppb	70 ppb	Yes
Harris CS							
NO ₂	1-hr	67.73	51.47	26.13	145.33	188	Yes
	Annual	16.09	2.11	0.90	19.10	100	Yes
PM ₁₀	24-hr	48.00	3.65	0.79	52.44	150	Yes
PM _{2.5}	24-hr	17.33	1.68	0.54	19.55	35	Yes
	Annual	7.17	0.31	0.12	7.60	9	Yes
CO	1-hr	1,374	96.32	49.00	1,519	40,000	Yes
	8-hr	916	51.25	20.98	988	10,000	Yes
SO ₂	1-hr	11.34	2.83	1.36	15.53	196	Yes
O ₃	8-hr	60.33 ppb	0.53 ppb		60.86 ppb	70 ppb	Yes
Stallworth CS							
NO ₂	1-hr	55.63	93.07	28.40	177.10	188	Yes
	Annual	8.50	5.46	2.18	16.14	100	Yes
PM ₁₀	24-hr	28.33	3.08	3.59	35.00	150	Yes
PM _{2.5}	24-hr	16.20	1.28	2.11	19.59	35	Yes
	Annual	6.86	0.50	0.21	7.57	9	Yes
CO	1-hr	1,374	72.36	79.11	1,525	40,000	Yes
	8-hr	916	19.13	48.20	983	10,000	Yes
SO ₂	1-hr	11.34	1.65	3.50	16.49	196	Yes
O ₃	8-hr	59.39 ppb	0.39 ppb		59.39 ppb	70 ppb	Yes
Swann CS							
					Maximum (100% Load)		
NO ₂	1-hr	55.63	NA	63.31	118.94	188	Yes
	Annual	9.06	NA	5.04	14.10	100	Yes
PM ₁₀	24-hr	28.33	NA	7.89	36.17	150	Yes
PM _{2.5}	24-hr	16.20	NA	5.56	21.76	35	Yes
	Annual	6.86	NA	0.87	7.73	9	Yes
CO	1-hr	802	NA	210.33	1,012	40,000	Yes
	8-hr	573	NA	173.84	747	10,000	Yes
SO ₂	1-hr	8.46	NA	8.08	16.54	196	Yes
O ₃	8-hr	62.33 ppb	NA	0.20	62.53 ppb	70 ppb	Yes
Sources: Mountain Valley July 6, 2026 response to EIR 3 Attachment 9-2, table 2-3, FERC Accession No. 20260706-5190; Mountain Valley October 23, 2025 Application, Resource Report 9, Appendix A tables 2-3 and 2-5, FERC Accession No. 20251023-5112.							
NA = not applicable.							
^a Includes maximum modeled effect, background concentrations, and estimated secondary effects from precursor pollutants for PM _{2.5} and O ₃ . Regional sources were not considered for purposes of this modeling assessment.							

B.9.4 Climate Change

Commenters expressed concerns about the Project's effect on climate change. Climate change is the variation in the Earth's climate (including temperature, precipitation, humidity, wind, and other meteorological variables) over time. Climate change is driven by accumulation of GHG in the atmosphere due to the increased consumption of fossil fuels (e.g., coal, petroleum, and natural gas) since the early beginnings of the industrial age and accelerating in the mid- to late 20th century.¹⁰⁷ The GHGs produced by fossil-fuel combustion are CO₂, CH₄, and N₂O.

In 2017 and 2018, the U.S. Global Change Research Program (USGCRP)¹⁰⁸ issued its *Climate Science Special Report: Fourth National Climate Assessment*, Volumes I and II.¹⁰⁹ This report and the report by the Intergovernmental Panel on Climate Change, *Climate Change 2021: The Physical Science Basis*, states that climate change has resulted in a wide range of effects across every region of the country and the globe. Those effects extend beyond atmospheric climate change alone and include changes to water resources, agriculture, ecosystems, human health, and ocean systems.¹¹⁰ According to the Fourth Assessment Report, the United States and the world are warming; global sea level is rising and oceans are acidifying; and certain weather events are becoming more frequent and more severe.¹¹¹ These effects have accelerated throughout the end of the 20th and into the 21st century.¹¹²

GHG emissions do not result in proportional local and immediate effects; it is the combined concentration in the atmosphere that affects the global climate. These are fundamentally global effects that feed back to local and regional climate change effects. Thus, the geographic scope for cumulative analysis of GHG emissions is global rather than local or regional. For example, a project 1 mile away emitting 1 ton of GHG would contribute to climate change in a similar manner as a project 2,000 miles distant also emitting 1 ton of GHG.

¹⁰⁷ Intergovernmental Panel on Climate Change, United Nations, Summary for Policymakers of Climate Change 2021: The Physical Science Basis (Valerie Masson-Delmotte et al., eds.) (2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf (IPCC Report) at SPM-5. Other forces contribute to climate change, such as agriculture, forest clearing, and other anthropogenically driven sources.

¹⁰⁸ The U.S. Global Change Research Program comprised representatives from 13 federal departments and agencies and issued reports every 4 years that described the state of the science relating to climate change and the effects of climate change on different regions of the United States and on various societal and environmental sectors, such as water resources, agriculture, energy use, and human health.

¹⁰⁹ U.S. Global Change Research Program, Climate Science Special Report, Fourth National Climate Assessment | Volume I (Donald J. Wuebbles et al. eds) (2017), (USGCRP Report Volume I); available at <https://repository.library.noaa.gov/view/noaa/19486>. U.S. Global Change Research Program, Fourth National Climate Assessment, Volume II Impacts, Risks, And Adaptation In The United States (David Reidmiller et al. eds.) (2018) (USGCRP Report Volume II); available at <https://repository.library.noaa.gov/view/noaa/19487>.

¹¹⁰ IPCC Report at SPM-5 to SPM-10.

¹¹¹ USGCRP Report Volume II at 73-75.

¹¹² See, e.g., USGCRP Report Volume II at 99 (describing accelerating flooding rates in Atlantic and Gulf Coast cities).

Climate change is a global phenomenon; however, for this analysis, we will focus on the existing and potential climate change effects in the general Project area. The USGCRP's Fourth Assessment Report notes that the following observations of environmental effects are attributed to climate change in the Southeast region of the United States (USGCRP, 2017, 2018):

- the near-decade of 2010 through 2017 has been warmer than any previous decade since 1920 for average daily maximum and average daily minimum temperature;
- since 1960, there have been lower numbers of days above 95°F compared to the pre-1960 period, but during the 2010s, the number of nights above 75°F has been nearly double the average over 1901 to 1960. The length of the freeze-free season was 1.5 weeks longer on average in the 2010s compared to any other historical period on record;
- the number of days with 3 or more inches of rain has been historically high over the past 25 years. The 1990s, 2000s, and 2010s rank first, third, and second, respectively, in number of events;
- summers have been either increasingly dry or extremely wet, depending on location;
- several Southeast coastal cities experienced all-time records of coastal flooding occurrences, including Wilmington, North Carolina (90 days); Charleston, South Carolina (38 days); Mayport, Florida (19 days); Miami, Florida (18 days); Key West, Florida (14 days); and Fernandina Beach, Florida (7 days). These flooding occurrences increased more than 50 percent in 2015 compared to 2014; and
- there has been an increase in high tide flooding frequency directly tied to sea level rise. For example, in Norfolk, Virginia, local relative sea level rise has led to a fourfold increase in the probability of exceeding National Weather Service thresholds compared to the 1960s.

The USGCRP's Fourth Assessment Report notes the following projections of climate change effects in the Southeast with a high or very high level of confidence¹¹³ (USGCRP, 2018):

- climate models project that nighttime temperatures above 75°F and daytime maximum temperatures above 95°F become the summer norm. Nights above 80°F and days above 100°F, which are now relatively rare, would become common;

¹¹³ The report authors assessed current scientific understanding of climate change based on available scientific literature. Each "Key Finding" listed in the report is accompanied by a confidence statement indicating the consistency of evidence or the consistency of model projections. A high level of confidence results from "moderate evidence (several sources, some consistency, methods vary and/or documentation limited, etc.), medium consensus." A very high level of confidence results from "strong evidence (established theory, multiple sources, consistent results, well documented and accepted methods, etc.), high consensus." <https://science2017.globalchange.gov/chapter/front-matter-guide/>.

- lowland coastal areas are expected to receive less rainfall on average but experience more frequent intense rainfall events followed by longer drought periods;
- drought and sea level rise will create stressful conditions for coastal trees that are not adapted to higher salinity levels;
- other coastal species may also be stressed by sea level rise and warmer temperatures, prompting migration out of the area; and
- tropical storms and hurricanes may become more intense.

While these effects individually may be manageable for certain communities, the effects of compound events (such as simultaneous heat and drought, or flooding associated with high precipitation on top of saturated soils) can be greater than the sum of the parts.¹¹⁴

The GHG emissions associated with construction and operation of the Project were identified and quantified in sections B.9.1 and B.9.2 of this EA. Emissions of GHGs are typically expressed in terms of CO₂e. Construction of the Project may result in emissions of about 80,119 tons (72,683 metric tons) of CO₂e. Operation of proposed Project equipment would result in emissions of about 1.08 million tons per year (0.98 million metric tons per year) of CO₂e. Downstream GHG emissions are outside the scope of the environmental review for this Project.¹¹⁵

Construction and operation of Project facilities may increase the atmospheric concentration of GHG in combination with past, current, and future emissions from all other sources globally, and would contribute incrementally to future climate change effects. To assess effects on climate change associated with the Project, Commission staff considered whether it could identify discrete physical effects resulting from the Project's GHG emissions or compare the Project's GHG emissions to established targets designed to combat climate change.

To date, Commission staff have not identified a methodology to attribute discrete, quantifiable, physical effects on the environment resulting from the Project's incremental contribution to GHGs. Without the ability to determine discrete resource effects, Commission staff are unable to assess the Project's contribution to climate change through any objective analysis of physical effect attributable to the Project. Additionally, Commission staff have not been able to find an established threshold for determining the Project's significance when compared to established GHG reduction targets at the federal or state level. Ultimately, this EA is not characterizing the Project's GHG emissions as significant or insignificant.¹¹⁶ However, as we have done in prior NEPA analyses, we disclose the Project's GHG emissions in comparison to national and state GHG emission inventories.

¹¹⁴ USGCRP Report Volume II.

¹¹⁵ *Seven Cnty. Infrastructure Coal. v. Eagle Cnty., Colo.*, 605 U.S. 168, 186-90 (2025).

¹¹⁶ *See e.g., Driftwood Pipeline LLC*, 183 FERC ¶ 61,049, at P 63 (2023) ("...there currently are no accepted tools or methods for the Commission to use to determine significance, therefore the Commission is not herein characterizing these emissions as significant or insignificant.").

In order to provide context of the Project GHG emissions on a national level, we compare the Project's GHG emissions to the total current GHG emissions inventory for the United States as a whole. At a national level, 5,489 million metric tons of CO₂e were emitted in 2022 (inclusive of CO₂e sources and sinks; EPA, 2024c). Construction emissions from the Project could potentially increase CO₂e emissions based on the national 2022 levels by 0.001 percent. In subsequent years, Project operations could result in a potential increase in CO₂e emissions by 0.018 percent based on the national 2022 levels.

To provide context on a state level, we compare the Project's estimated GHG emissions to the state emission inventories. The Project's construction and operational emissions would occur in West Virginia and Virginia. State-level GHG emissions in 2024 (inclusive of CO₂ sources and sinks) were 72.3 million metric tons in West Virginia and 99.2 million metric tons in Virginia. Based on each state's GHG emissions in 2024, Project construction emissions could potentially increase CO₂ emissions by 0.07 percent in West Virginia and 0.02 percent in Virginia.¹¹⁷ Project operational emissions in West Virginia could potentially increase CO₂ emissions based on West Virginia's statewide 2024 levels by 0.66 percent. Project operational emissions from the Project in Virginia could potentially increase CO₂ emissions based on Virginia's statewide 2024 levels by 0.51 percent.¹¹⁸

We also typically compare a project's operational emissions in the context of state GHG reduction goals.¹¹⁹ Virginia set a statutory target in 2020 to achieve net-zero GHG emissions by 2045,¹²⁰ and West Virginia has not set statewide GHG emission reduction goals.

B.10. Noise

We received comments regarding concerns about noise pollution resulting from the Project. Construction and operation of the Project are expected to create noise effects. The EPA reports that a day-night average sound level (L_{dn}) of 55 decibels on the A-weighted scale (dBA) protects the public from indoor and outdoor activity interference (EPA, 1974). We have adopted this criterion and use it to evaluate potential Project-related noise effects at NSAs such as homes, places of worship, and hospitals. We require that noise attributable to any new or modified compressor station or compressor engine during full-load operation not exceed an L_{dn} of 55 dBA at any NSA. In addition, noise from nighttime construction activities should not exceed an L_{dn}

¹¹⁷ Total construction GHG emissions for West Virginia and Virginia would be 48,205 metric tons and 24,478 metric tons, respectively. Values were taken from table B.8-1 and converted to metric tons.

¹¹⁸ Total operational GHG emissions for West Virginia and Virginia would be 479,620 metric tons and 504,029 metric tons, respectively. Values were taken from table B.8-2 and converted to metric tons.

¹¹⁹ We reviewed the U.S. State Greenhouse Emission Targets site for individual state requirements at <https://www.c2es.org/document/greenhouse-gas-emissions-targets/>.

¹²⁰ No contextual comparisons are provided for net-zero targets.

of 55 dBA, which equates to an equivalent sound level (L_{eq}) of 48.6 dBA.¹²¹ In general, a person's threshold of perception for a perceivable change in loudness on the A-weighted sound level is about 3 dBA, whereas a 6 dBA change is clearly noticeable, and a 9 dBA change is perceived as either twice or half as loud.

The State of West Virginia and the State of Virginia do not maintain noise regulations applicable to the Project but do have regulations applicable to air vibrations (overpressure) during blasting, which Mountain Valley would follow. Fayette County, West Virginia, has a noise ordinance and Montgomery County, Virginia, has noise and vibration ordinances. Table B11 in appendix B provides additional information on state and county noise and vibration restrictions applicable to construction and/or operation of Project facilities.

B.10.1 Construction Noise

Noise would be generated during construction of the aboveground facility modifications for the Project. Noise levels would be highest in the immediate vicinity of construction activities and would diminish with distance from each work area. These effects would be localized and temporary. During construction activities, the increase in noise levels would be localized to the area around the compressor station and would vary depending on the phase of construction. Typically, the highest sound levels would be associated with earthwork activities. Sound level changes would depend on the type of equipment used, the duration of use for each piece of equipment, the number of construction vehicles and machines used simultaneously, and the distance between the sound source and receptor. Table B.10-1 under Operational Noise includes distances for the closest NSAs to the Project. Construction activities associated with the Project would be performed with standard heavy equipment such as excavators, cranes, dump trucks, and concrete mixer trucks. Noise would also be generated by trucks and other light vehicles traveling in and near areas under construction. Construction equipment and worker vehicles generally operate intermittently and may change depending on Project activity or phase. Mountain Valley would generally limit construction to daytime hours (7:00 a.m. to 7:00 p.m., or daylight hours when sunset occurs later); however, some activities may require nighttime work as described in section A.6.

Project construction may require blasting; however, blasting would be considered only after all other reasonable means of excavation have been evaluated. Blasting would generate impulsive noise and vibration in the vicinity of excavation activities. Mountain Valley has developed a general Blasting Plan and would prepare site-specific blasting plans prior to blasting. These plans have procedures for reducing noise and vibration during blasting, including backfilling and limiting charge sizes. The Project would comply with state regulations for peak particle velocity and overpressure during blasting activities.

¹²¹ The L_{dn} accounts for the duration and time the noise is encountered, and late night to early morning (10:00 p.m. to 7:00 a.m.) noise exposures are penalized +10 decibels (dB) to account for people's greater sensitivity to sound during the nighttime hours. For an essentially steady sound source that operates continuously over a 24-hour period, the L_{dn} is about 6.4 dB above the measured L_{eq} . Due to the nighttime penalty, for a facility to meet the 55 dBA L_{dn} limit, it must be designed such that the constant 24-hour noise level does not exceed an L_{eq} of 48.6 dBA.

Based on our noise analysis and the temporary nature of the construction, we conclude that noise effects from Project construction activities would not be significant.

B.10.2 Operational Noise

The Project would include modifications that would affect operational noise at three compressor stations and installation of one new compressor station. Mountain Valley conducted sound surveys and acoustical analyses for the nearest NSAs to the Bradshaw, Harris, Stallworth, and Swann CSs that included any existing facilities. Table B.10-1 summarizes the estimated operational noise effects at the nearest NSAs at full load during operation of the Project.

TABLE B.10-1 Compressor Station Operational Noise Analysis				
NSA ^a	Distance and Direction from Facility	Existing L _{dn} (dBA) ^b	Estimated Post- Construction Operation L _{dn} (dBA)	Noise Increase due to Modified/New Compressor Station (dB)
Bradshaw CS				
NSA 3	3,105 feet west-southwest	44.6	44.6	0.0
NSA 4	3,030 feet southeast	44.2	44.7	0.5
Harris CS				
NSA 1	1,445 feet north	45.6	47.2	1.6
NSA 2	1,825 feet southwest	40.7	44.6	3.9
NSA 3	1,965 feet south-southeast	40.7	44.5	3.8
NSA 4	3,340 feet west-southwest	42.7	43.5	0.8
Stallworth CS				
NSA 1	2,835 feet west-northwest	41.4	43.0	1.6
NSA 2	1,985 feet west	46.0	46.9	0.9
NSA 3	2,085 feet southwest	45.0	46.4	1.4
NSA 4	1,465 feet south-southwest	42.5	44.3	1.8
NSA 6	2,755 feet east-southeast	40.9	42.8	1.9
Swann CS				
NSA 1	1,445 feet west-northwest	49.1	51.6	2.5
NSA 2	1,890 feet north-northeast	49.1	52.3	3.2
NSA 3	2,810 feet east-northeast	49.1	50.2	1.1
NSA 4	2,450 feet east-southeast	43.9	44.3	0.4
NSA 5	1,530 feet west-southwest	49.1	52.1	3.0
Source: Mountain Valley October 23, 2025 Application, Resource Report 9 table 9.2-19 through table 9.2-22, FERC Accession No. 20251023-5112.				
^a Some NSAs from Mountain Valley's 2016 Application are not reported due to being abandoned/demolished or acquired by Mountain Valley. The original NSA numbering for Bradshaw CS and Stallworth CS from Mountain Valley's 2016 Application was retained, despite gaps, for clarity.				
^b Includes compressor station and background noise.				

The noise modeling demonstrates compliance with our noise requirements. Noise levels at the new and modified compressor stations would be below 55 dBA L_{dn} at all nearby NSAs. To minimize noise effects associated with Project operations, Mountain Valley would implement mitigation measures such as acoustically designed buildings, high-performance engine exhaust

and inlet systems, turbine intake and exhaust silencers, compressor casings, pipe and duct lagging, and emergency shutdown and unit vent silencers.

We received comments regarding health effects due to vibration from Project operation. Mountain Valley indicated that the Project equipment is balanced to high vibrational tolerances during manufacturing and that operation of the Project equipment would not generate perceptible ground-borne vibration effects. Turbine exhausts could produce low-frequency noise; however, Mountain Valley indicated that Project operational sound pressure levels would be below the perceptible threshold for low-frequency noise or induced vibration.

In order to confirm Mountain Valley meets our noise requirements, **we recommend that any Commission Order approving the Project include a mandatory condition requiring Mountain Valley to file noise surveys after placing the modified Bradshaw, Harris, and Stallworth CSs and the proposed Swann CS into service to demonstrate that noise does not exceed an L_{dn} of 55 dBA at any nearby NSA, and to install additional noise controls if the levels are exceeded** (see section D, recommended condition no. 13).

Based on the projected operational noise levels, the mitigation proposed, and our recommendations, we conclude that the noise and vibration attributable to operation of the Project would not cause a significant effect.

B.11. Reliability and Safety

We received several comments expressing concern about effects of the Project on general health and safety of residents (including concerns about radioactive waste from pipeline maintenance operations), the lack of odorant in the natural gas, and the adequacy of safety measures for construction and operation of the Project.

The pressurization of natural gas at a compressor station involves some risk to the public in the event of an accident and subsequent release of gas. The greatest hazard is a fire or explosion following a leak or rupture at the facility. An unconfined mixture of methane and air is not explosive; however, it may ignite and burn if there is an ignition source. Pipeline companies regularly clean, or “pig,” the pipeline to remove solid and liquid materials, which may contain naturally occurring radionuclides. This waste must be disposed of properly in compliance with the Resource Conservation and Recovery Act and state laws.

Methane, the primary component of natural gas, is colorless, odorless, and tasteless. It is not toxic, but is classified as a simple asphyxiate, possessing a slight inhalation hazard. If breathed in high concentration, oxygen deficiency can result in serious injury or death. Methane is buoyant at atmospheric temperatures and disperses rapidly in air. Odorant is typically added to distribution lines rather than large transmission pipelines, because its presence can interfere with industrial uses.

Commenters expressed concern regarding safety risk from increases in maximum allowable operating pressure for the Mountain Valley Mainline and changes to the “blast zone” (Potential Impact Radius). The maximum allowable operating pressure of the Mountain Valley

Mainline would not increase as part of the Project, and there would be no change to the calculation of the Potential Impact Radius.¹²²

Commenters also noted concerns about effects on the Mountain Valley Mainline and the condition of the pipe used for the Mainline.¹²³ The Commission reviews each project on its own merits and has siting authority for interstate natural gas infrastructure. Our regulations require applicants to certify that projects under our jurisdiction would be designed, constructed, operated, and maintained in accordance with the PHMSA Minimum Federal Safety Standards in 49 CFR 192, which are specifically designed to protect pipeline operators and the public. This section also regulates material selection and qualification; minimum design; welding, joining, and other construction requirements; protection from internal, external, and atmospheric corrosion; testing; inspection; operations and maintenance; integrity management; and personnel qualifications. FERC accepts this certification and does not impose additional safety standards. Under a Memorandum of Understanding on Natural Gas Transportation Facilities dated January 15, 1993, between the DOT and FERC, the DOT has the exclusive authority to promulgate federal safety standards used in the transportation of natural gas. If the Commission becomes aware of an existing or potential safety problem, there is a provision in the 1993 memorandum to promptly alert the DOT. The memorandum also provides for referring complaints and inquiries made by state and local governments and the general public involving safety matters related to pipelines under the Commission's jurisdiction.

Part 192 specifically addresses natural gas pipeline safety issues, prescribes the minimum standards for operating and maintaining pipeline facilities, and incorporates compressor station design, including emergency shutdowns and safety equipment. Part 192 also requires a pipeline operator to establish a written emergency plan that includes procedures to minimize the hazards in a natural gas pipeline emergency. These regulations are intended to ensure adequate protection for the public and to prevent natural gas facility accidents and failures. In accordance with 49 CFR 192.505, compressor stations are built and tested to class 3 requirements and must also have pressure relief or protective devices and be designed such that pressure relief valves can be discharged without hazard. Existing compressor station modifications and the proposed Swann CS would be designed to meet other 49 CFR 192 requirements.

The existing compressor facilities that would be modified are already equipped with an emergency shut down (ESD) system to protect the public and operating personnel during an emergency. In case of an emergency, ESD systems would shut down compressor units, close the station isolation valves, and vent gas from the station piping to reduce the possibility of gas ignition and fire. The ESD system could be activated automatically by sensors that continuously monitor for the presence of fire and explosive mixtures in the compressor building or compressor

¹²² The Potential Impact Radius is determined by the following formula: $r = 0.69 \times \sqrt{(p \times d^2)}$, where: r = the radius of a circular area surrounding the point of failure (feet), p = the maximum allowable operating pressure in the pipeline segment (psig), d = the normal diameter of the pipeline (inches). The Potential Impact Radius for the 42-inch-diameter Mountain Valley pipeline with a maximum allowable operating pressure of 1,480 psig is 1,115 feet; the Potential Impact Radius for components of the Equitrans Expansion Project range from 131 to 717 feet. Source: Mountain Valley Project and Equitrans Expansion Project Environmental Impact Statement issued by FERC June 2017, Docket Nos. CP16-10-000 and CP16-13-000.

¹²³ *E.g.*, Terry December 22, 2025 Comment on Filing, FERC Accession No. 20251222-5043.

enclosures. The ESD system could also be activated manually by station personnel in emergency events or remotely by Gas Control. An ESD system would also be installed for the proposed Swann CS.

We received comments expressing concerns about traffic and safety effects on emergency response and community evacuation near the proposed Swann CS due to the proximity of the train tracks along Roanoke Road. Under 49 CFR 192.616, the operator must also establish a Public Awareness Program to enable customers, the public, government officials, and those engaged in excavation activities to recognize the presence of gas pipelines and abnormal conditions and report it to appropriate public officials. Mountain Valley's program uses multi-media channels and mailings each year that include emergency contact phone numbers. Mountain Valley would provide the appropriate training to local emergency service personnel before the facilities are placed in service. Mountain Valley has ongoing conversations with local officials, first-responders, and public safety agencies about the Project and ways to ensure the safe construction and operation of the proposed facilities. Mountain Valley has also communicated with Norfolk Southern regarding its procedures for stopping trains at this location in the event of an emergency requiring evacuation and is actively working with Montgomery County on a plan to address a long-standing, preexisting access problem at Cove Hollow Road.

Mountain Valley would construct and operate the Project in compliance with all applicable DOT safety regulations and would maintain frequent contact with the PHMSA. Accordingly, we conclude that the Project would represent only a minimum increase in risk to the public.

SECTION C – ALTERNATIVES

We evaluated alternatives to the Project to determine whether they would be reasonable and environmentally preferable to the proposed action. Alternatives evaluated included the no-action alternative, system alternatives, compression alternatives, and site alternatives for the Swann CS.

C.1. No-Action Alternative

We received comments requesting evaluation of the No-Action Alternative. NEPA requires the Commission to consider and evaluate the No-Action Alternative. The No-Action Alternative provides a benchmark for decisionmakers to compare the magnitude of environmental effects of the proposed activity and alternatives. We have prepared this EA to inform the Commission and stakeholders about the expected effects that would occur if the Project were constructed and operated. The Commission will ultimately determine the Project need and could choose the No-Action Alternative. If the No-Action Alternative is chosen by the Commission and the Project does not take place, the environmental effects associated with the proposed activity, as described in this EA, would not occur. However, the Project's goals would not be met. We have not identified any reasonably foreseeable negative environmental effects of implementing the no-action alternative because it is speculative to predict how customers' needs would be addressed in the absence of the proposed Project.

C.2. Evaluation of Alternatives

The following evaluation criteria were used for developing and reviewing alternatives: (1) ability to meet the Project's stated objective; (2) technical and economic feasibility; and (3) significant environmental advantage over the proposed action. Alternatives were reviewed against the evaluation criteria in this sequence.

Through environmental comparison and application of our professional judgement, each alternative was considered to a point where it became clear if the alternative could or could not meet the three evaluation criteria. Alternatives that would not meet the Project's objective or were not feasible were not brought forward to the next level of review (i.e., the third evaluation criterion). To ensure a consistent environmental comparison and to normalize the comparison factors, we generally used desktop sources of information (e.g., publicly available data, geographic information system data, aerial imagery) and assume the same general workspace requirements.

C.3. System Alternatives

System alternatives would generally use existing, modified, or proposed pipeline systems or existing compression to meet the purpose and need of the Project. Implementation of a system alternative may eliminate the need to construct all or part of a proposed project, potentially reducing effects.

The Commission does not plan, design, build or operate infrastructure; it evaluates applications for infrastructure. The Commission may either approve, approve with modifications to minimize effects, or deny an application. Should the Commission determine that another

system alternative is preferred, it could not compel the alternative system operator to plan, design, build, and operate the alternative, nor could it compel the project proponent to carry out the alternative. Thus, our selection of a systems alternative as the preferred alternative would be the same as recommending the Commission deny approval of the proposed project, rather than approving the preferred system alternative.

Mountain Valley owns and operates its Mainline system within the Project area and evaluated three pipeline looping alternatives within its system instead of the proposed compressor station modifications. Table C.3-1 compares pipeline looping alternatives for the Project. A commenter requested that a system alternative analysis be conducted to determine whether the proposed Project capacity or transportation of natural gas could be met using existing or recently upgraded regional pipeline infrastructure. Mountain Valley confirmed that no other pipeline systems have the delivery capabilities or available service capacity necessary to transport the volumes required to meet the needs of the binding precedent agreements executed for the Project.¹²⁴

TABLE C.3-1				
Pipeline Looping Alternatives				
Alternative	Objective	Length of 42-Inch-Diameter Pipeline Looping Required (miles)	Approximate Milepost (MP) Locations of Pipeline Looping	Approximate Land Disturbance (acres) ^a
Looping Option 1	Eliminate proposed Swann CS	90	MP 154 – MP 244	1,364
Looping Option 2	Eliminate proposed Swann CS, reduce new compression added at Stallworth CS	149	MP 154 – MP 303	2,258
Looping Option 3	Eliminate proposed Swann CS and all proposed modifications to existing stations	200	MP 25.4 – MP 135.2 and MP 154.4 – MP 244.4	3,030
Source: Mountain Valley October 23, 2025 Application, Resource Report 10 table 10.3-1, FERC Accession No. 20251023-5112.				
a Approximate land disturbance is based on a conceptual 125-foot-wide construction right-of-way of which 25 feet would overlap the existing Mountain Valley Mainline right-of-way. Approximate land disturbance does not include off-right-of-way areas such as staging or contractor yards, or extra right-of-way width that may be required for side slopes, waterbody crossings, highway crossings, etc., or areas with reduced right-of-way width at wetland crossings.				

Although construction of an additional pipeline loop is feasible and could eliminate or reduce the need for the proposed Swann CS and modifications to existing compressor stations, these alternatives would substantially increase project land requirements during construction and operation, with the smallest of the looping alternatives (option 1) substantially increasing land disturbance from the 24.1 acres for the proposed Swann CS to 1,364 acres. Looping option 1 would require up to 90 miles of pipeline loop and would include crossings of the George Washington and Jefferson National Forest, the Appalachian National Scenic Trail, and the Greenbrier River. Looping options 2 and 3 would also cross these environmentally sensitive areas and require even more miles of pipeline loop. Therefore, we conclude that alternatives

¹²⁴ Mountain Valley April 20, 2026 response to EIR 2 question 2 under Resource Report 10, FERC Accession No. 20260420-5234.

using Mountain Valley’s existing pipeline systems would not offer a significant environmental advantage over the proposed action.

C.4. Compression Alternatives

Electric-motor-driven compression was considered at the compressor stations as an alternative to the proposed gas-fired turbine engines as recommended by several commenters.¹²⁵ This alternative would require the construction of new transmission lines ranging in length from 2.5 to 6.9 miles to supply each of the station sites. Additionally, a commenter recommended the use of a renewable hybrid system composed of solar-arrays and battery energy storage systems to power auxiliary equipment and reduce reliance on grid-sourced or fossil-fuel-sourced energy.¹²⁶ The Commission does not evaluate individual components of proposed facilities as separate alternatives unless it would result in a significant change in the level of environmental effects. The use of a renewable hybrid system to power auxiliary equipment would not provide a significant environmental advantage over the proposed action; therefore, it was not evaluated as a separate alternative. Table E1 in appendix E compares environmental resources affected by electric-motor-driven compression alternatives. Assuming a 100-foot-wide construction and operation right-of-way, new transmission lines and substations would affect 33.1 acres of land for the Bradshaw CS, 43 acres of land for the Harris CS, 82.1 acres of land for the Stallworth CS, and 34 acres of land for the Swann CS.¹²⁷

Much of the power on the electric grid is presently generated by combusting fossil fuels, such as coal and natural gas. This means that when electric motors are used, they are likely obtaining some of their electricity from emission-generating fuels. Tables E2 and E3 in appendix E compare emissions for natural gas-fired compressors (existing and proposed) and electric-motor-driven compressors at each of the Project compressor stations. At all stations, electric compression is estimated to produce more emissions than use of natural gas compression, with the exception of a minor 0.03 percent reduction in PM_{2.5} emissions at the Swann CS.¹²⁸

Based on this assessment, we conclude that electric-motor-driven compression would not present a significant environmental advantage compared to the proposed natural gas-fired compression at the compressor stations.

C.5. Swann Compressor Station Alternatives

Table C.5-1 compares the proposed Swann CS to three alternative locations. Alternative Swann CS sites were evaluated where they could reasonably meet the Project’s operational requirements and have the potential to avoid or reduce effects associated with the proposed site,

¹²⁵ See, e.g., Preserve Giles December 19, 2025 Comment on Filing, FERC Accession No. 20251219-5523.

¹²⁶ *Id.*

¹²⁷ Mountain Valley February 13, 2026 response to EIR 1 question 2 under Resource Report 10, FERC Accession No. 20260213-5147.

¹²⁸ Mountain Valley February 13, 2026 response to EIR 1 question 2 under Resource Report 10, attachment 10-2-a, table 10.5-1, FERC Accession No. 20260213-5147.

such as proximity to NSAs, visual effects, or land disturbance. Alternatives that presented a potential to address these types of issues were explored for further consideration. Maps showing the proposed and alternative sites are provided in appendix E.

TABLE C.5-1				
Comparison of Proposed Swann Compressor Station Site and Alternative Sites				
Feature	Swann Alternative 1	Swann Alternative 2	Swann Alternative 3	Proposed Swann CS
General				
Construction footprint (acres) ^a	24.2	15.7	19.0	25.1
New access road length, approximate (feet) ^b	3,455	100	1,130	0
Electric power service length, approximate (feet)	2,500	3,400	3,000	600
Suction and discharge pipe length, approximate (feet) ^a	300	400	400	1,000
Land Use				
Land use	Forest	Agricultural, forest	Agricultural, forest	Forest, scrub, barren
Nearest NSA (feet/direction) ^c	850/SW	700/N	1,160/NW	787/W
NSAs within 0.5-mile (number) ^c	8	95	52	136
NSAs within 1 mile (number) ^c	19	237	90	263
Resources and Constraints				
Forested land affected by construction (acres)	20.3	4.4	4.5	12.6
Floodplain designation and area (acres) ^d	Zone X (24.2)	Zone X (15.7)	Zone X (19.0)	Zone X (25.1)
Prime Farmland or Farmland of Statewide Importance (acres)	13.4	11.5	18.8	7.8
Within 0.5 mile of NRHP Historic District	Yes ^e	No	No	Yes ^e
Potential to encounter karst	Moderate	Moderate	No	Moderate ^f
Predominant slope (percent)	5–20	5–25	15–35	0–25
Source: Mountain Valley June 26, 2026 supplement Table 10.4-1, FERC Accession No. 20260626-5111. Note that Alternative 1 in this table corresponds to Alternative 2 in the supplement, Alternative 2 in this table corresponds to Alternative 3 in the supplement, and Alternative 3 in this table corresponds to Alternative 4 in the supplement.				
a Construction footprint of alternative sites is based on roughly estimated cut and fill requirements. Suction and discharge facilities would be within cut and fill footprints for compressor stations.				
b The proposed Swann CS site would not require new access roads but would require upgrades to up to 2,700 feet of existing access roads.				
c NSA locations and numbers are estimated from review of aerial imagery. Distances are measured from the site boundary for comparison purposes. Therefore, the distance of the closest NSA for the proposed site does not match the distance in section B.9.2 of Resource Report 9, which uses distance measured from the compressor building.				
d FEMA flood zone designation: Zone X = minimal flood hazard; Zone A = 1% Annual Chance Flood Hazard.				
e Alternative Site 1 is within the North Fork Valley RHD; the proposed site is 0.5 mile southeast of the Lafayette Historic District.				
f Geologic mapping indicates the potential to encounter karst at the proposed site; however, site-specific geotechnical analysis shows that karst geology is not present at the proposed site.				

Alternative 1 is located about 7.2 miles north of the proposed site. The alternative site is immediately adjacent to the existing Mountain Valley Mainline and would require about 3,455 feet of new access road crossing steep terrain. As shown in table C.5-1, there are 8 NSAs within 0.5 mile of Alternative 1 compared to the 136 NSAs identified for the proposed site; however, the nearest NSA is about 850 feet away compared to 787 feet for the proposed site.

The area between the alternative site and nearest NSA is forested, which would potentially minimize visual effects of a compressor station at this site. The site would require about 20.3 acres of tree clearing, the most of any site considered.

Alternatives 2 and 3 are located about 0.9 mile north and 6.4 miles southeast of the proposed site, respectively. Both alternatives would have fewer NSAs within 0.5 mile than the proposed site; however, the Alternative 2 site is elevated above and closer to NSAs than the proposed site. While there is some forested area between the Alternative 2 site and NSAs, vegetation would likely provide only minimal visual screening or noise buffers because the station would be elevated. About 1,130 feet of new access road would be required to reach the Alternative 3 site, and comparatively, no new access road would be required for the proposed site. Additionally, preliminary review of topography indicates that extensive cut and fill and slope stabilization would be required for the Alternative 3 site.

Although all of the alternative site locations are technically feasible and each offers certain advantages compared to the proposed site (such as increased distance from NSAs or fewer nearby receptors), these benefits are offset by other environmental, engineering, or operational constraints. Therefore, we conclude that the alternative compressor site locations for the Swann CS would not offer a significant environmental advantage over the proposed site.

C.6. Alternatives Conclusions

We did not identify any alternatives that would meet all three evaluation criteria. We conclude that the proposed action, with our recommended environmental conditions, is the preferred alternative to meet the Project objectives.

SECTION D – STAFF’S CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis in this EA, we have determined that approval of the Project would not constitute a major federal action significantly affecting the quality of the human environment. We recommend that the Commission Order contain a finding of no significant impact and that the following mitigation measures be included as conditions to any Certificate the Commission may issue:

1. Mountain Valley shall follow the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests) and as identified in the EA, unless modified by the Order. Mountain Valley must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary;
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of the Office of Energy Projects (OEP), or the Director’s designee, **before using that modification**.
2. The Director of OEP, or the Director’s designee, has delegated authority to address any requests for approvals or authorizations necessary to carry out the conditions of the Order, and take whatever steps are necessary to ensure the protection of environmental resources during construction and operation of the Project. This authority shall allow:
 - a. the modification of conditions of the Order;
 - b. stop-work authority; and
 - c. the imposition of any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the Order as well as the avoidance or mitigation of unforeseen adverse environmental effects resulting from Project construction and operation.
3. **Prior to any construction**, Mountain Valley shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EIs), and contractor personnel would be informed of the EI’s authority and have been or would be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EA, as supplemented by filed alignment sheets. **As soon as they are available, and before the start of construction**, Mountain Valley shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the Order. All requests for modifications of environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Mountain Valley's exercise of eminent domain authority granted under Natural Gas Act (NGA) section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. Mountain Valley's right of eminent domain granted under NGA section 7(h) does not authorize it to increase the size of its natural gas facilities to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. Mountain Valley shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP, or the Director's designee, **before construction in or near that area.**

This requirement does not apply to extra workspace allowed by the Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan* and/or minor field realignments per landowner needs and requirements that do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

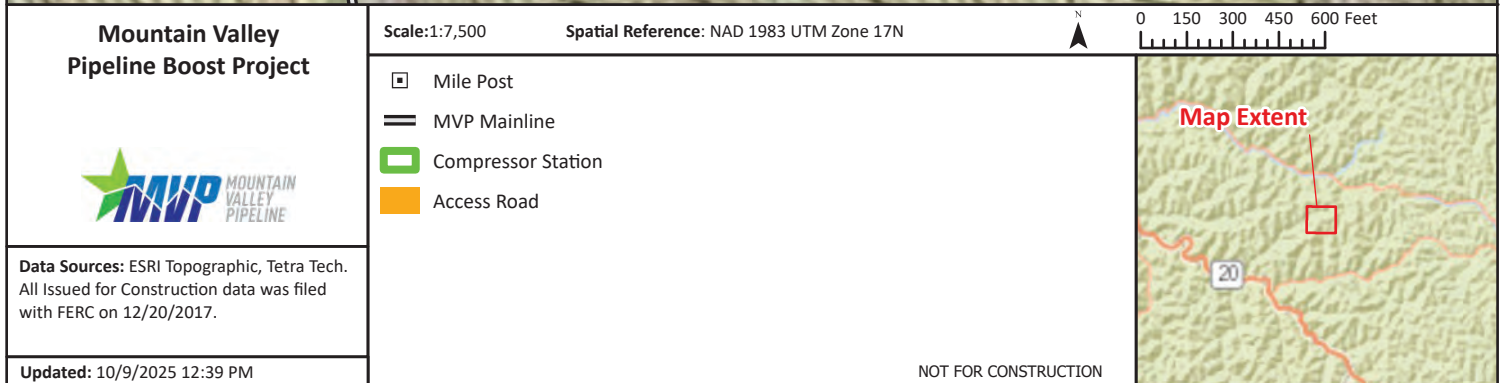
- a. implementation of cultural resources mitigation measures;
 - b. implementation of endangered, threatened, or special concern species mitigation measures;
 - c. recommendations by state regulatory authorities; and
 - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. **Within 60 days of the acceptance of the authorization and before construction begins,** Mountain Valley shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP, or the Director's designee. Mountain Valley must file revisions to the plan as schedules change. The plan shall identify:
 - a. how Mountain Valley would implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by the Order;
 - b. how Mountain Valley would incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to on-site construction and inspection personnel;

- c. the number of EIs assigned per spread, and how the company would ensure that sufficient personnel are available to implement the environmental mitigation;
 - d. company personnel, including EIs and contractors, who would receive copies of the appropriate material;
 - e. the location and dates of the environmental compliance training and instructions Mountain Valley would give to all personnel involved with construction and restoration (initial and refresher training as the Project progresses and personnel change), with the opportunity for OEP staff to participate in the training session(s);
 - f. the company personnel (if known) and specific portion of Mountain Valley's organization having responsibility for compliance;
 - g. the procedures (including use of contract penalties) Mountain Valley would follow if noncompliance occurs; and
 - h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - i. the completion of all required surveys and reports;
 - ii. the environmental compliance training of on-site personnel;
 - iii. the start of construction; and
 - iv. the start and completion of restoration.
7. Mountain Valley shall employ at least one EI per construction spread. The EI shall be:
- a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;
 - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
 - c. empowered to order correction of acts that violate the environmental conditions of the Order and any other authorizing document;
 - d. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
 - e. responsible for maintaining status reports.
8. Beginning with the filing of its Implementation Plan, Mountain Valley shall file updated status reports with the Secretary on a **monthly** basis until all construction and restoration activities are complete. On request, these status reports would also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
- a. an update on Mountain Valley's efforts to obtain the necessary federal authorizations;
 - b. the construction status of the Project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
 - c. a list of all problems encountered and each instance of noncompliance observed by the EI(s) during the reporting period (both for the conditions imposed by the

- Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
 - d. a description of the corrective actions implemented in response to all instances of noncompliance;
 - e. the effectiveness of all corrective actions implemented;
 - f. a description of any landowner/resident complaints that may relate to compliance with the requirements of the Order, and the measures taken to satisfy their concerns; and
 - g. copies of any correspondence received by Mountain Valley from other federal, state, or local permitting agencies concerning instances of noncompliance, and Mountain Valley's response.
9. Mountain Valley must receive written authorization from the Director of OEP, or the Director's designee, **before commencing construction of any Project facilities**. To obtain such authorization, Mountain Valley must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).
10. Mountain Valley must receive written authorization from the Director of OEP, or the Director's designee, **before placing the Project into service**. Such authorization would be granted only following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the Project are proceeding satisfactorily.
11. **Within 30 days of placing the authorized facilities in service**, Mountain Valley shall file an affirmative statement with the Secretary, certified by a senior company official:
- a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities would be consistent with all applicable conditions; or
 - b. identifying which of the conditions in the Order Mountain Valley has complied with or would comply with. This statement shall also identify any areas affected by the Project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
12. Mountain Valley **shall not begin** construction activities **until**:
- a. FERC staff receives final comments from the FWS regarding the proposed action;
 - b. FERC staff completes ESA consultation with the FWS; and
 - c. Mountain Valley has received written notification from the Director of OEP, or the Director's designee, that construction or use of mitigation may begin. (*section B.5.3*)
13. Mountain Valley shall file noise surveys with the Secretary **no later than 60 days** after placing the modified Bradshaw, Harris, and Stallworth CSs and the proposed Swann CS in service. If a full power load condition noise survey is not possible, Mountain Valley shall provide an interim survey at maximum possible horsepower load and provide the full load survey **within 6 months**. If the noise attributable to the operation of the equipment at the

stations under interim or full horsepower load conditions exceeds an L_{dn} of 55 dBA at any nearby NSAs, Mountain Valley shall file a report on what changes are needed and shall install the additional noise controls to meet the level **within 1 year** of the in-service date. Mountain Valley shall confirm compliance with the above requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls. (*section B.10.2*)

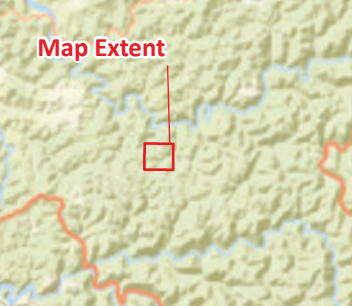
APPENDIX A
MAPS OF THE PROPOSED FACILITIES

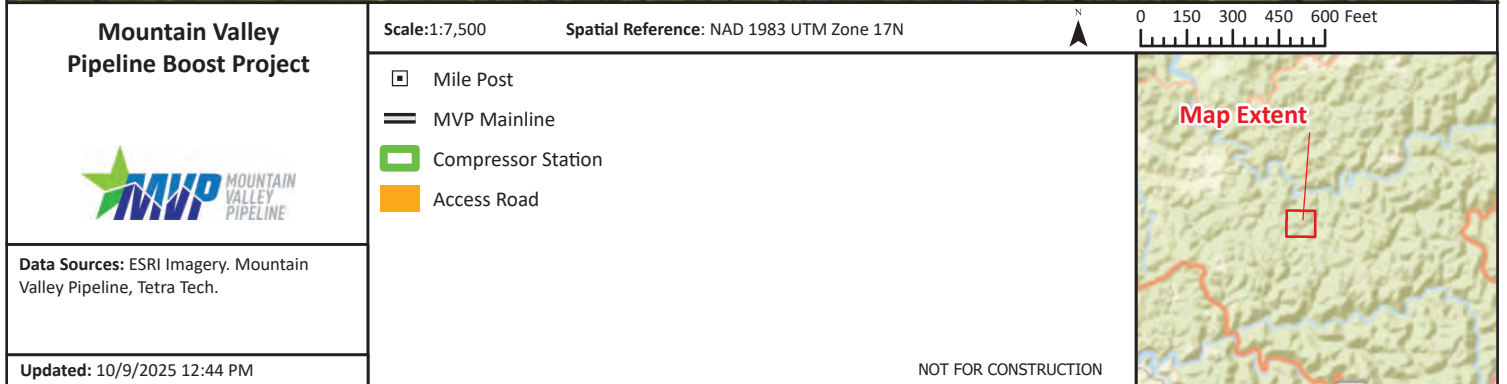


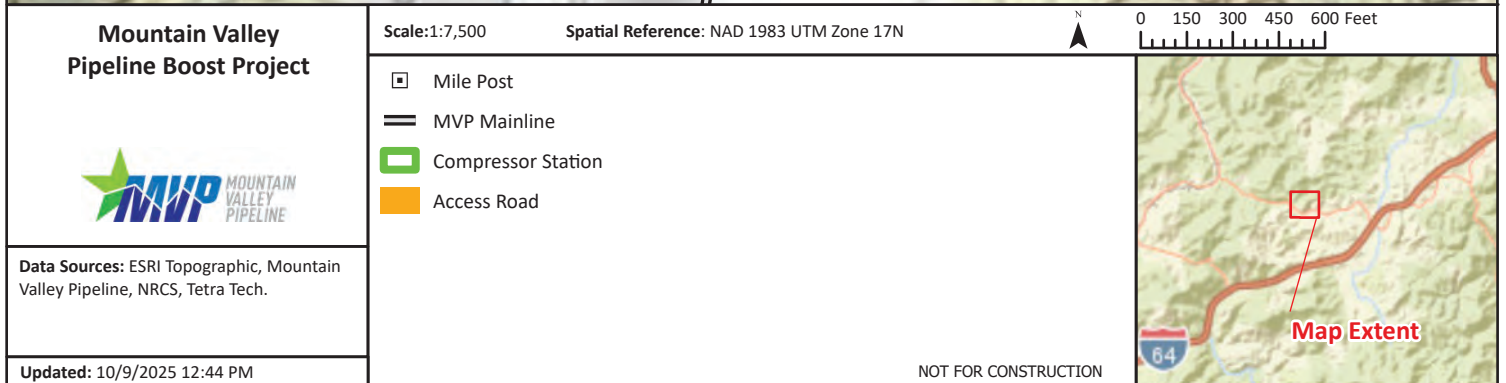


Mountain Valley Pipeline Boost Project 	Scale: 1:7,500 Spatial Reference: NAD 1983 UTM Zone 17N	 
	 Mile Post  Mile Post  MVP Mainline  Compressor Station  Access Road	
Data Sources: ESRI Imagery, Tetra Tech. All Issued for Construction data was filed with FERC on 12/20/2017.	NOT FOR CONSTRUCTION	
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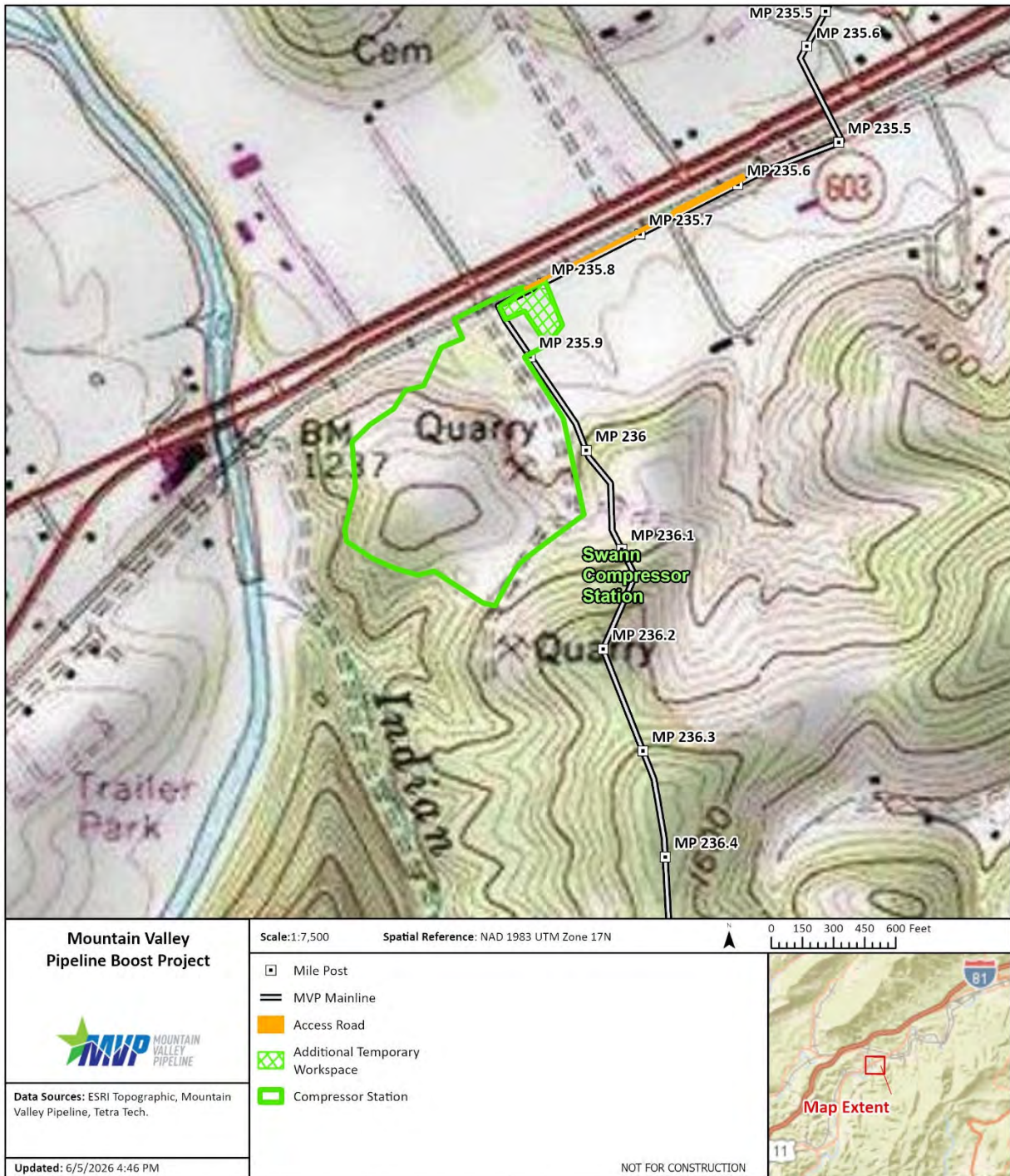
Mountain Valley Pipeline Boost Project 	Scale: 1:7,500 Spatial Reference: NAD 1983 UTM Zone 17N	0 150 300 450 600 Feet 
Data Sources: ESRI Topographic, Mountain Valley Pipeline, Tetra Tech.	 Mile Post  MVP Mainline  Compressor Station  Access Road	Map Extent 
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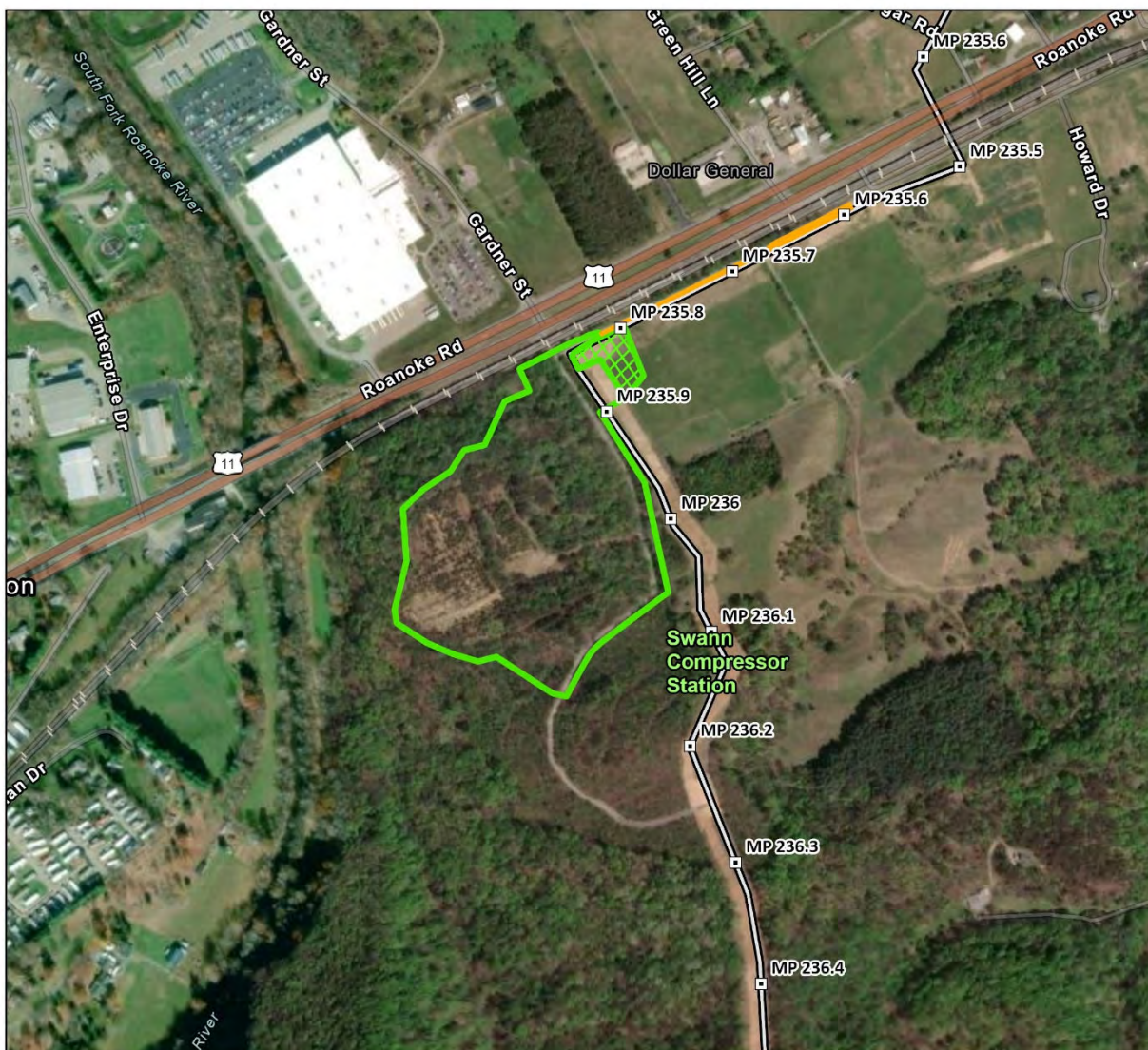




Mountain Valley Pipeline Boost Project 	Scale: 1:7,500 Spatial Reference: NAD 1983 UTM Zone 17N  
	 Mile Post  Compressor Station  Access Road  MVP Mainline
Data Sources: ESRI Imagery, Mountain Valley Pipeline, Tetra Tech.	
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Mountain Valley Pipeline Boost Project



Data Sources: ESRI Imagery, Mountain Valley Pipeline, Tetra Tech.

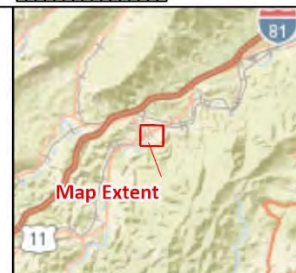
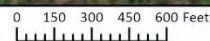
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Scale: 1:7,500

Spatial Reference: NAD 1983 UTM Zone 17N

- Mile Post
- MVP Mainline
- Access Road
- Additional Temporary Workspace
- Compressor Station

NOT FOR CONSTRUCTION





Mountain Valley Pipeline Boost Project 	Scale: 1:7,500 Spatial Reference: NAD 1983 UTM Zone 17N	0 150 300 450 600 Feet 
Data Sources: ESRI Topographic, Tetra Tech.	 Laydown Yard	Map Extent 
Updated: 10/9/2025 12:44 PM		



Mountain Valley Pipeline Boost Project  Data Sources: ESRI Imagery, Tetra Tech. Updated: 10/9/2025 12:39 PM	Scale:1:7,500 Spatial Reference: NAD 1983 UTM Zone 17N	 
	 Laydown Yard	Map Extent 



Mountain Valley Pipeline Boost Project 	Scale: 1:7,500 Spatial Reference: NAD 1983 UTM Zone 17N	 0 150 300 450 600 Feet
	 Laydown Yard	
	Data Sources: ESRI Topographic, Tetra Tech	
Updated: 10/9/2025 12:44 PM	NOT FOR CONSTRUCTION	



Mountain Valley Pipeline Boost Project	Scale: 1:7,500 Spatial Reference: NAD 1983 UTM Zone 17N	0 150 300 450 600 Feet
	 Laydown Yard	
Data Sources: ESRI Imagery, Tetra Tech		
Updated: 10/9/2025 12:44 PM	NOT FOR CONSTRUCTION	



Mountain Valley Pipeline Boost Project  Data Sources: ESRI Topographic, Tetra Tech. Updated: 10/9/2025 12:39 PM	Scale: 1:7,500 Spatial Reference: NAD 1983 UTM Zone 17N	0 150 300 450 600 Feet 
	 Laydown Yard	 Map Extent

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Mountain Valley Pipeline Boost Project  Data Sources: ESRI Topographic, Tetra Tech. Updated: 3/16/2026 2:46 PM	Scale: 1:7,500 Spatial Reference: NAD 1983 UTM Zone 17N	0 150 300 450 600 Feet 
	 Laydown Yard	 Map Extent

NOT FOR CONSTRUCTION

APPENDIX B
ADDITIONAL TABLES

APPENDIX B

ADDITIONAL TABLES

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Table B1			
Permits, Approvals, and Consultations			
Agency	Permit/Approval/Consultation	Submittal	Receipt
Federal Energy Regulatory Commission	Natural Gas Act section 7; Certificate for construction and operation of interstate natural gas facilities	October 23, 2025	Pending
U.S. Fish and Wildlife Service, Virginia and West Virginia Field Offices	Consultation under section 7 of the Endangered Species Act for potential effects on federally protected species	March 24, 2026	Pending
	Consultation regarding effects on migratory birds		
	Consultation regarding effects on fish and wildlife		
West Virginia			
West Virginia Department of Environmental Protection (WVDEP), Division of Air Quality	Air quality permits/permit modifications for air emissions	Bradshaw – November 3, 2025 Harris – November 10, 2025 Stallworth – November 17, 2025	Bradshaw – January 6, 2026 Harris – January 27, 2026 Stallworth – February 19, 2026
WVDEP, Division of Water and Waste Management	National Pollutant Discharge Elimination System (NPDES) Permit – Construction Stormwater General Permit for Oil and Gas Related Construction Activities	2nd Quarter 2026	Pending
West Virginia Department of Transportation	Road bonds and heavy haul permits	4th Quarter 2026	Pending
West Virginia Division of Culture and History (State Historic Preservation Office [SHPO])	National Historic Preservation Act (NHPA) section 106 consultation and clearance regarding potential effects on pre-historic and historic resources eligible for listing in the National Register of Historic Places	August 8, 2025	August 22, 2025
West Virginia Department of Natural Resources (WVDNR), Natural Resources	Informal consultation	August 1, 2025	August 1, 2025
WVDNR, Office of Wildlife Resources	Informal consultation	August 1, 2025	August 1, 2025
Virginia			
Virginia Department of Wildlife Resources	Informal consultation	August 1, 2025	April 22, 2026, coordination ongoing 3rd Quarter 2026
Virginia Department of Transportation	Heavy haul and entrance permits	4th Quarter 2026	Pending
Virginia Department of Historic Resources, Division of Review and Compliance (SHPO)	NHPA section 106 consultation and clearance regarding potential effects on pre-historic and historic resources eligible for listing in the National Register of Historic Places	August 8, 2025	November 13, 2025
Virginia Department of Conservation and Recreation, Natural Heritage Program	Consultation for potential effects on wildlife species and habitat and other environmental resources	August 1, 2025	June 25, 2026
Virginia Department of Environmental Quality (VDEQ), Air Division	Air quality permits for air emissions	November 3, 2025	4th Quarter 2026 ^a
^a The review of this application is currently suspended within the VDEQ. Mountain Valley is working diligently with the VDEQ to resolve the ongoing issue. An estimated approval time frame will be provided when Mountain Valley has additional information.			

Table B2				
Site-Specific Modifications to the FERC Procedures				
Facility Location	County, State	FERC Procedures Reference	Modification	Reason
Laydown Yard MVP-LY-001	Wetzel, WV	IV.A.1d, IV.A.1e, and II.A.1	Temporary parking, storage, or servicing of construction equipment, vehicles, and materials and petroleum products within 100 feet of a waterbody and wetlands at this location. Extra work areas within 50 feet of a waterbody.	Temporary material storage, staging, and laydown for the proposed Bradshaw CS modification. The laydown yard is an existing gravel yard previously used for this purpose that is within 50 feet of a waterbody and wetlands. Appropriate controls will be installed at the edge of the laydown yard to minimize off-site effects.
Laydown Yard MVP-CY-002A	Braxton, WV	IV.A.1d, IV.A.1e, and II.A.1	Temporary parking, storage, or servicing of construction equipment, vehicles, and materials and petroleum products within 100 feet of wetlands. Extra work areas within 50 feet of a waterbody.	Temporary material storage, staging, and laydown for the proposed Harris CS modification. The laydown yard has been previously used for this purpose and is within 50 feet of wetlands. Appropriate controls will be installed at the edge of the laydown yard to minimize off-site effects.
Stallworth Compressor Station	Fayette, WV	VI.A.6	Wetland W-10 is located within compressor station site.	W-10 is an isolated wetland that has developed in a cleared, previously disturbed, flat area immediately adjacent to the existing Stallworth CS. Expanding the compressor station in a different direction would result in extensive grading in areas of steep slopes and/or clearing of previously undisturbed vegetation.
Swann Compressor Station	Montgomery, VA	IV.A.1d and IV.A.1e	Temporary parking, storage, or servicing of construction equipment, vehicles, and materials and petroleum products within 100 feet of the on-site ephemeral drainages at this location.	Temporary material storage, staging, and laydown for the proposed Swann CS will be located within 100 feet of onsite ephemeral drainages S-05 and S06. Appropriate controls will be installed at the edge of the work areas to protect the drainages.
Swann Compressor Station	Montgomery, VA	VI.A.6	Wetland W-03 is located within compressor station site.	W-03 is an isolated wetland located within the previously disturbed area on the flattest portion of the site. Avoidance is not possible due to the presence of adjacent steep slopes, and to avoid the Roanoke River, its tributaries and undisturbed forested vegetation.
Source: Mountain Valley April 20, 2026 responses to EIR 2, FERC Accession No. 20260420-5234.				

Table B3				
Soil Characteristics and Limitations (acres)				
Facility	Prime Farmland ^a	Highly Erodible – Water ^b	Highly Erodible – Wind ^c	Poor Revegetation Potential ^d
Bradshaw CS	6.3	6.3	0.0	6.3
Harris CS	5.6	5.6	2.9	5.6
Stallworth CS	6.3	0.2	6.5	6.5
Swann CS	7.8	7.7	1.3	24.4
Bradshaw CS Laydown Yard	2.6	0.0	0.0	0.0
Laydown Yards MVP-CY-002 and MVP-CY-002A (Harris)	1.5	1.5	1.5	1.5
Swann CS Laydown Yard	17.4	3.1	14.9	17.4
Project Total ^e	47.5	24.4	27.1	61.7
Source of soils data: USDA NRCS, 2025. Source of acreages: Mountain Valley June 26, 2026 supplement, revised table 7.3-1, FERC Accession No. 20260626-5111. Note: None of the soils in the Project area are characterized as having severe compaction potential. a Areas identified as prime farmland soils are identified as lands that meet the “all prime farmland” or “farmland of statewide and local importance” criteria as determined by the Soil Survey Geographic Database (SSURGO). b Areas identified as highly water erodible soils are ranked by SSURGO erosion hazard (Road/Trail) criteria. c Areas identified as highly wind erodible soils have a wind erodibility group of greater than 5 and less than 8 as determined by SSURGO. d Areas identified to have poor revegetation potential are lands that have a Capability Class 3 or greater and slopes greater than 8 percent as determined by SSURGO. e Due to rounding, totals may not equal the sum of addends.				

Table B4														
Vegetation Acreage Affected by Construction and Operation of the Proposed Project														
Facility, County, State	Agricultural ^a		Forested/Woodland ^b		Scrub-Shrub ^c		Herbaceous ^d		Wetlands ^e		Other ^f		Total ^g	
	Const ^h	Oper ^h	Const	Oper	Const	Oper	Const	Oper	Const	Oper	Const	Oper	Const	Oper
Permanent Aboveground Facilities														
Bradshaw CS	0	0	0	0	0	0	0	0	0	0	6.3	6.3	6.3	6.3 ⁱ
Harris CS	0	0	0	0	0	0	<0.1	<0.1	0	0	5.6	5.6	5.6	5.6 ⁱ
Stallworth CS	0	0	0	0	0	0	0.5	0.5	<0.1	<0.1	5.9	5.9	6.4	6.4 ⁱ
Swann CS	4.4	3.6	12.6	12.6	1.3	1.3	0.6	0.6	<0.1	<0.1	6.1	5.6	25.1	23.8
Laydown Yards														
MVP-LY-001 (near Bradshaw CS)	0	0	0	0	0	0	0	0	0	0	2.7	0	2.7	0
MVP-CY-002 and MVP-CY-002A (near Harris CS)	0	0	0	0	0.9	0	0.6	0	0	0	<0.1	0	1.5	0
Swann CS Laydown Yard	13.2	0	0	0	0	0	0	0	0	0	4.2	0	17.4	0
Swann CS Access Road Modifications ^j	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.3
Total	17.6	3.6	12.6	12.6	2.2	1.3	1.8	1.2	<0.1	<0.1	31.1	23.4	65.30	42.4
Source: Mountain Valley March 20, 2026 supplemental filing, attachment 1-1c revised table 3.2-1, FERC Accession No. 20260320-5294.														
a Includes cultivated and pasture lands.														
b All affected forest/woodland is deciduous.														
c Acreage does not match National Land Cover Database (NLCD) data; calculations were adjusted based on aerial imagery and knowledge of the sites.														
d Includes grassland and herbaceous areas not general under intensive management. Acreage does not match NLCD data; calculations were adjusted based on aerial imagery and knowledge of the sites.														
e Includes data from field delineation. Does not match NLCD data used for other vegetation/land use categories.														
f Includes barren, industrial, commercial, and residential land uses as defined in Resource Report 8. Acreage does not match NLCD data; calculations were adjusted based on aerial imagery and knowledge of the sites.														
g Minor discrepancies in subtotals/totals are due to rounding.														
h Const = Construction. Oper = Operation. Construction acreages also include the land for operation.														
i Most of the land within the Bradshaw, Harris, and Stallworth CSs is within the area of existing operation, as certificated for the Mountain Valley Mainline in Docket No. CP16-10-000. No acres at the Bradshaw CS, less than 0.1 acre at the Harris CS, 0.5 acre at the Stallworth CS are outside of the area of existing operation.														
j Mountain Valley April 20, 2026 response to EIR 2 question 2 under Resource Report 10, FERC Accession No. 20260420-5234.														

Table B5	
Non-Native/Invasive Plant Species Identified in the Swann Compressor Station ^a	
Scientific Name	Common Name
Highly Invasive Plant Species ^b	
<i>Ailanthus altissima</i> ^{d,e}	Tree-of-heaven
<i>Alliaria petiolate</i> ^{d,e}	Garlic Mustard
<i>Celastrus orbiculatus</i> ^{d,e}	Oriental Bittersweet
<i>Centuaurea stoebe</i> ssp. <i>micranthos</i> ^{d,e}	Spotted Knapweed
<i>Cirsium arvense</i> ^d	Canada Thistle
<i>Lonicera japonica</i> ^{d,e}	Japanese Honeysuckle
<i>Microstegium vimineum</i> ^{d,e}	Japanese Stiltgrass
<i>Persicaria perfoliata</i> ^{d,e}	Mile-a-minute
<i>Pueraria montana</i> var. <i>lobata</i> ^{d,e}	Kudzu
<i>Rosa multiflora</i> ^{d,e}	Multiflora Rose
<i>Rubus phoenicolasius</i> ^{d,e}	Wineberry
<i>Securigera varia</i> ^e	Crown-Vetch
<i>Sorghum halepense</i> ^{d,e}	Johnson Grass
Moderately Invasive Plant Species ^c	
<i>Albizia julibrissin</i> ^{d,e,f}	Mimosa/Silktree
<i>Cirsium vulgare</i> ^{d,e}	Bull Thistle
<i>Holcus lanatus</i> ^d	Common Velvet Grass
<i>Lespedeza bicolor</i> ^e	Shrubby Lespedeza
<i>Miscanthus sinensis</i> ^{d,e,g}	Chinese Silvergrass
<i>Paulownia tomentosa</i> ^{d,e}	Royal Paulownia
<i>Persicaria longiseta</i> ^d	Long-bristled Smartweed
<i>Phleum pratense</i>	Timothy
<i>Pyrus calleryana</i> ^d	Callery Pear
<i>Rumex crispus</i> ssp. <i>crispus</i>	Curly Dock
Sources: Heffernan et al., 2024; WVDNR, 2025; Mountain Valley, July 6, 2026 response to EIR 3, Resource Report 3 question 5, Attachment 3-5, Noxious Weed and Invasive Species Control Plan, FERC Accession No. 20260706-5190. a Aquatic invasive plants occurring in Project counties do not have potential habitat in the Project area; therefore, they have been removed from this list. b Highly invasive species exhibit the most invasive tendencies in natural areas and native plant habitats. They pose a significant threat to native species, natural communities or the economy by disrupting ecosystem processes and causing major alterations in plant community composition and structure. They establish readily in natural systems and spread rapidly. c Moderately invasive species may have minor influence on ecosystem processes, alter plant community composition, and affect community structure in at least one layer. They may become dominant in the understory layer without threatening all species found in the community. These species usually require a minor disturbance to become established. d Species listed on Virginia's Invasive Species List and present in the Mountain Region (Heffernan et al. 2024). e Species listed under WVDNR Invasive Species Program. f Species is moderate threat in West Virginia but low threat in Virginia. g Species is moderate threat in Virginia but low threat in West Virginia.	

Table B6				
FWS Birds of Conservation Concern				
Common Name	Scientific Name	Habitat Type	Suitable Habitat Present Within Project Area	Breeding Range within Project Area
Bird Conservation Region 28 (Appalachian Mountains) and Bird Conservation Region 29 (Piedmont)				
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	Forest edges, tree groves, and thickets often adjacent to streams or marches	Yes	Yes
Black-capped Chickadee	<i>Poecile atricarpillus praticus</i>	Mixed and deciduous forests, willow thickets, or groves	Yes	Yes
Bobolink	<i>Dolichonyx oryzivorus</i>	Open meadows, fields and prairie	Yes	Yes
Canada Warbler	<i>Cardellina canadensis</i>	Mature hardwood forests preferably near streams and swamps	Yes	Yes
Cerulean Warbler	<i>Setophaga cerulea</i>	Deciduous forests, especially in river valleys	Yes	Yes
Chimney Swift	<i>Chaetura pelagica</i>	Developed and undeveloped areas; forests, fields, rivers, and lakes	Yes	Yes
Eastern Whip-poor-will	<i>Antrostomus vociferus</i>	Open, dry deciduous or mixed forests, forest edges or openings	Yes	Yes
Golden Eagle	<i>Aquila chrysaetos</i>	Open or partially open shrublands, grasslands, coniferous forests, farmlands, riverine systems	Yes	No
Golden-winged Warbler	<i>Vermivora chrysoptera</i>	Open woodlands, brushy clearings, undergrowth	Yes	Yes
Kentucky Warbler	<i>Geothlypis formosa</i>	Deep shaded woods with dense, humid thickets, bottomlands near creeks and rivers, ravines in upland deciduous forests, swamp edges	Yes	Yes
Prairie Warbler	<i>Setophaga discolor</i>	Brushing slash, bush pastures, low pines	Yes	Yes
Prothonotary Warbler	<i>Protonotaria citrea</i>	Wooded swamps, wetlands, river bottom hardwoods	Yes	Yes
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	Groves, farm country, orchards, shade trees in towns, large, scattered trees	Yes	Yes
Rusty Blackbird	<i>Euphagus carolinus</i>	River groves, wooded swamps, muskeg in summer	Yes	No
Wood Thrush	<i>Hylocichla mustelina</i>	Deciduous woodlands	Yes	Yes
Sources: NatureServe, 2021; FWS, 2021.				

Table B7			
State-Listed Fish, Plant, and Wildlife Species with the Potential to Occur in Relevant Proximity to the Project in Virginia			
Common Name	Scientific Name	State Status (Virginia) ^{a, b}	Potential Occurrence Information
Fish			
Roanoke Logperch	<i>Percina rex</i>	SE	South Fork Roanoke River, near Swann CS
Orange-fin Madtom	<i>Noturus gilberti</i>	ST	South Fork Roanoke River, near Swann CS
Insects			
Spatulate Stonefly	<i>Allocaonia simmonsii</i>	ROC	South Fork Roanoke River, near Swann CS
Mammals			
Indiana Bat	<i>Myotis sodalis</i>	FE ^c	Swann CS
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	FE ^c	Swann CS
Little Brown Bat	<i>Myotis lucifugus</i>	SE	Swann CS
Tricolored Bat	<i>Perimyotis subflavus</i>	SE	Swann CS
Plants			
Smooth Coneflower	<i>Echinacea laevigata</i>	FT, ST	Swann CS
Source: Mountain Valley July 6, 2026 response to EIR 3, FERC Accession No. 20260706-5190			
a There is no state status in West Virginia.			
b FE = Federally Endangered; FT = Federally Threatened; SE = State Endangered; ST = State Threatened; ROC = VDCR-DNH natural heritage resource of concern.			
c Adopted from the federal list of endangered and threatened species.			

Table B8			
Cultural Resources Site Summary and Recommendations			
Component (State)	Resource ID	NRHP Recommendation	SHPO Resource NRHP Recommendation
Bradshaw CS (WV)	46WZ123	Not eligible	Not eligible
MVP-LY-001	46WZ164	Not eligible	Not eligible
Harris CS (WV)	No cultural resources	N/A	N/A
Stallworth CS (WV)	44FA540	Not eligible	Not eligible
Swann CS (VA)	No cultural resources	N/A	N/A

Table B9		
Tribal Outreach for the Mountain Valley Boost Project		
Tribes	Communications	Response
Eastern Band of Cherokee Indians	August 8, 2025: Letter from Mountain Valley February 12, 2026: Letter from FERC	No response
Monacan Indian Nation	August 8, 2025: Letter from Mountain Valley February 12, 2026: Letter from FERC	No response
Delaware Nation	August 8, 2025: Letter from Mountain Valley February 12, 2026: Letter from FERC	No response
Eastern Shawnee Tribe of Oklahoma	August 8, 2025: Letter from Mountain Valley February 12, 2026: Letter from FERC	No response
Cherokee Nation	August 8, 2025: Letter from Mountain Valley February 12, 2026: Letter from FERC	No response
Catawba Indian Nation (aka Catawba Indian Tribe of South Carolina)	August 8, 2025: Letter from Mountain Valley February 12, 2026: Letter from FERC	No response
Osage Nation	August 8, 2025: Letter from Mountain Valley February 12, 2026: Letter from FERC	No response
Seneca-Cayuga Nation	August 8, 2025: Letter from Mountain Valley February 12, 2026: Letter from FERC	No response

Table B10					
Estimated Construction-Related Housing Demand by Site					
Facility	County	Estimated Housing Demand ^a	Estimated Available Housing Resources ^b		
			Housing Units Available for Rent ^b	Hotel and Motel Rooms ^c	Recreational Vehicle Spaces ^c
Bradshaw CS	Wetzel, West Virginia	50	43	166	0
Harris CS	Braxton, West Virginia	50	73	325	540
Stallworth CS	Fayette, West Virginia	25	300	300	425
Swann CS ^d	Montgomery, Virginia	110	566	1,600	58

Source: Mountain Valley October 23, 2025 Application, Resource Report 5 table 5.3-5, FERC Accession No. 20251023-5112.

a Estimated housing demand is based on the estimated non-local share of the total workforce by county.

b Many of these available units include more than one bedroom and, if rented, could be occupied by more than one worker.

c Data for hotel and motel rooms and recreational vehicle spaces were compiled from an online review. While not comprehensive, these data indicate that both types of housing (hotel and motel rooms and recreational vehicle spaces) are available in three of the four counties included in this table, with hotel and motel rooms available in the fourth county (Wetzel County).

d Additional housing resources not shown here are available in Roanoke County, which is less than 1 mile from the Swann CS.

Table B11	
State and County Noise and Vibration Regulations	
County/Municipality, State	Description
State of Virginia	Virginia Administrative Code 4VAC25-130-816.67 limits air overpressure during blasting at dwellings, public buildings, schools, churches, or community or institutional buildings: • 134 peak dB for measuring systems with a lower frequency limit of 0.1 Hz or lower (flat response)* • 133 peak dB for measuring systems with a lower frequency limit of 2 Hz or lower (flat response) • 129 peak dB for measuring systems with a lower frequency limit of 6 Hz or lower (flat response) • 105 peak dBC for C-weighted, slow-response measuring systems (when approved by the division.) The Code also limits vibration from blasting as maximum allowable peak particle velocity with a scaled distance factor, based on the distance from the blasting site: • 0 to 300 feet: 1.25 inches per second, scaled distance factor 50 • 301 to 5,000 feet: 1.00 inches per second, scaled distance factor 55 • 5,001 feet and beyond: 0.75 inches per second, scaled distance factor 65
State of West Virginia	West Virginia Code §22-4-13 similarly restricts air overpressure and vibration during blasting. The numerical limits are the same as the Virginia code; however, West Virginia uses a scaled distance factor of 50 regardless of the distance from the blasting site.
Fayette County, WV	The Fayette County Unified Development Code (Section Nine: Article 9000 – Development Standards, II. Noise Standards, 2009) includes a noise limit that applies at receiving residential property lines. The Code limits noise at the receiving residential property lines to 65 dBA between 7:00 a.m. and 6:00 p.m., and 55 dBA between 6:00 p.m. and 7:00 a.m. Construction activity from 7:00 a.m. to 7:00 p.m. is exempt from the ordinance.
Montgomery County, VA	The Montgomery County Code (section 7-80) includes a noise limit that applies at the receiving residential and agricultural property lines. The Code limits noise at the receiving property lines to 57 dBA between 7:00 a.m. and 10:00 p.m., and 52 dBA between 10:00 p.m. and 7:00 a.m. Section 10-46 of the Code provides maximum allowable PPV limits, based on the duration and land use: • Light Intensity Land Use (all districts except M-1 and M-L): ○ Continuous Vibration: The limit is 0.003 PPV at residential boundaries and 0.015 PPV at other lot lines. ○ Impulsive Vibration (100/minute or fewer): The limit is 0.006 PPV at residential boundaries and 0.030 PPV at other lot lines. ○ Infrequent Vibration (Fewer than 8 pulses per 24 hours): The limit is 0.015 PPV at residential boundaries and 0.075 PPV at other lot lines. • Heavy Intensity Land Use (M-1 district): ○ Continuous Vibration: The limit is 0.003 PPV at residential boundaries and 0.030 PPV at other lot lines. ○ Impulsive Vibration (100/minute or fewer): The limit is 0.006 PPV at residential boundaries and 0.060 PPV at other lot lines. ○ Infrequent Vibration (Fewer than 8 pulses per 24 hours): The limit is 0.015 PPV at residential boundaries and 0.150 PPV at other lot lines. • Nighttime Reduction: Between 8 p.m. and 7 a.m., all permissible vibration levels at residential district boundaries must be reduced to half of the values listed above.
Source: Mountain Valley October 23, 2025 Application, Resource Report 9, section 9.2.3 and Appendices 9-G through 9-J, FERC Accession No. 20251023-5112.	

Appendix B References

- FWS. 2021. Birds of Conservation Concern 2021. FWS, Migratory Birds Program. April. Falls Church, Virginia. <https://www.fws.gov/sites/default/files/documents/birds-ofconservation-concern-2021.pdf>.
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APPENDIX C
VISUAL RESOURCES

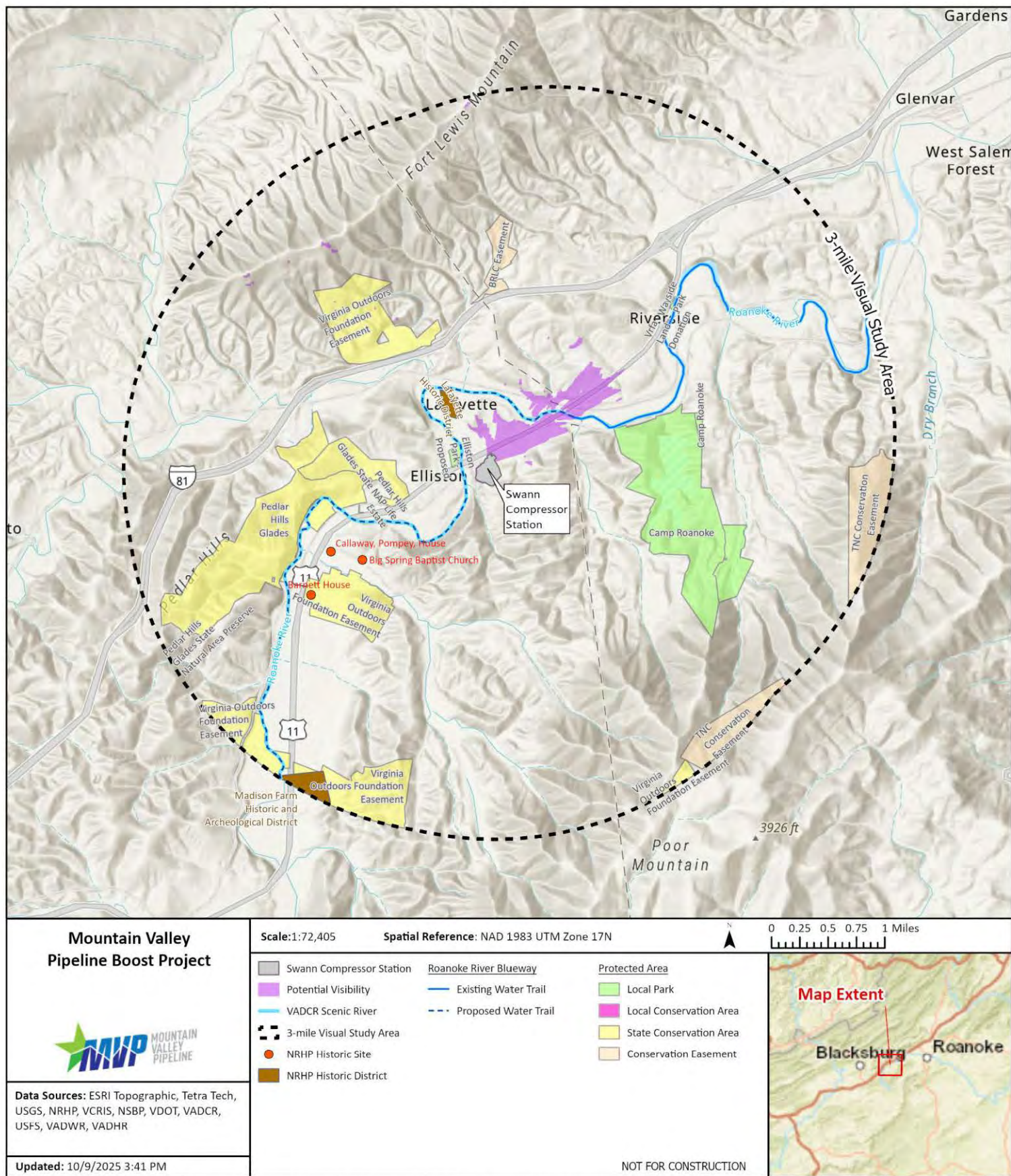


Figure 8.4-1 Potential Visibility of Swann Compressor Station

APPENDIX D

AIR QUALITY REGULATIONS AND MODELING INFORMATION

APPENDIX D

AIR QUALITY REGULATIONS AND MODELING INFORMATION

D.1. Local Air Quality and Climate

Air Quality Control Regions are areas established by the U.S. Environmental Protection Agency (EPA) and local agencies for air quality planning purposes, in which State Implementation Plans describe how the National Ambient Air Quality Standards (NAAQS) would be achieved and maintained. Each control region, or smaller portion within a region (such as a county), is designated, based on compliance with the NAAQS, as attainment, unclassifiable, maintenance, or nonattainment, on a pollutant by-pollutant basis. Areas in compliance or below the NAAQS are designated as attainment, while areas not in compliance or above the NAAQS are designated as nonattainment. Areas previously designated as nonattainment that have since demonstrated compliance with the NAAQS are designated as maintenance for that pollutant. Maintenance areas may be subject to more stringent regulatory requirements to ensure continued attainment of the NAAQS. Areas that lack sufficient data to determine attainment status are designated unclassifiable and treated as attainment areas.

The proposed Project would be in Wetzel, Braxton, and Fayette Counties, West Virginia, and Montgomery County, Virginia, which are all classified as attainment/unclassifiable (considered attainment) for all criteria pollutants. Existing ambient background levels of criteria pollutants in the vicinity of the compressor stations are below the NAAQS.

Among the nine U.S. climate regions defined by the National Centers for Environmental Information, West Virginia falls under the Ohio Valley (Central) climate region and Virginia is in the Southeast climate region. West Virginia has a humid continental climate that is defined by hot summers and cold winters, while Virginia has a humid subtropical climate.

Monthly climatological data for the compressor station locations is referenced from the most representative nearby meteorological stations. Meteorological data for the compressor stations was obtained from the National Climatic Data Center for the period of 1991 to 2020 (National Centers for Environmental Information, 2025). The annual average temperatures and average precipitation data for these areas are presented in table D1 below. Winds are generally from the west across all the Project areas.

TABLE D1						
Climate Parameters at the Compressor Station Locations						
Compressor Station	Monitor	ID	Approximate Distance and Direction from Station	Average Daily Minimum Temperature – January (degrees Fahrenheit [°F])	Average Daily Maximum Temperature – July (°F)	Annual Precipitation (inches)
Bradshaw	Morgantown Hart Field, WV	GHCND: USW00013736	33 miles NE	26.1	82.8	43.15
Harris	Elkins-Randolph County Regional Airport, WV	GHCND: USW00013729	36 miles NE	22.0	81.8	47.21
Stallworth	Beckley Raleigh County Airport, WV	GHCND: USW00003872	20 miles SW	26.2	79.5	43.54
Swann	Blacksburg NWSO, VA	GHCND: USC00440766	11 miles SW	23.8	80.8	42.64
Source: Mountain Valley October 23, 2025 Application, Resource Report 9, table 9.1-1, FERC Accession No. 20251023-5112. NWSO = National Weather Service Office; VA = Virginia; WV = West Virginia; NE= northeast; SW = southwest						

D.2. Federal Air Permitting/Regulatory Requirements

Mountain Valley would add the following emissions sources at the existing Bradshaw Compressor Station (CS): one Solar Titan 130E natural gas-fired turbine rated at 23,483 horsepower (hp) at site-specific conditions (International Organization for Standardization [ISO] rating at 23,470 hp); net increase of one Capstone C200 natural gas-fired microturbine rated at 200 kilowatts (kW)¹; one natural gas-fired fuel gas heater rated at 1.54 millions of British Thermal Units per hour (MMBtu/hr); and installing associated piping, fugitive components, and equipment.

Mountain Valley would add the following emissions sources at the existing Harris CS: installing one Solar Titan 350 natural gas-fired turbine rated at 56,590 hp at site-specific conditions (ISO rating at 52,500 hp); one natural gas-fired fuel gas heater rated at 1.54 MMBtu/hr; net increase of four Capstone C200 natural gas-fired microturbines each rated at 200 kW²; and associated piping, fugitive components, and equipment.

Mountain Valley would add or modify the following emissions sources at the existing Stallworth CS: upgrading the two existing Solar Titan 130 natural gas-fired turbines to two Solar Titan 130E natural gas-fired turbines rated at 22,374 hp at site-specific conditions (ISO rating at 23,470 hp); adding two Solar Titan 130E natural gas-fired turbines rated at 22,374 hp at

¹ The FERC Certificate authorization for the Mountain Valley Mainline includes 14 microturbines. Of these, 10 are currently installed on-site, and Mountain Valley plans to install 5 additional units. This will result in a net increase of 1 microturbine. The existing fuel gas heater ratings have also been adjusted to the lower, as-built conditions. The existing turbine ratings have been adjusted to reflect as-built conditions.

² The FERC Certificate authorization for the Mountain Valley Mainline include 9 microturbines. Of these, 8 are currently installed on site, and Mountain Valley plans to install 5 additional units. This will result in a net increase of 4 microturbines. The existing fuel gas heater ratings have also been adjusted to the lower, as-built conditions. The existing turbine ratings have been adjusted to reflect as-built conditions.

site-specific conditions (ISO rating at 23,470 hp); adding three Capstone C200 natural gas-fired microturbines each rated at 200 kW³; adding one natural gas-fired fuel gas heater rated at 1.54 MMBtu/hr; and adding associated piping, fugitive components, and equipment.

Mountain Valley would install the following emissions sources at the proposed Swann CS: two Solar Titan 350 natural gas-fired turbines, each rated at 56,834 hp at site-specific conditions (ISO rating at 52,500 hp each); one Solar Titan 250 natural gas-fired turbine rated at 32,493 hp at site-specific conditions (ISO rating at 31,900 hp); 15 Capstone C200 natural gas-fired microturbine generators, each rated at 200 kW; three natural gas-fired fuel gas heaters, with a combined rating of 4.62 MMBtu/hr; two storage tanks (one for produced fluids and one for oil) with capacities less than 15,000 gallons; and, associated piping, fugitive components, and equipment.

There are three basic categories of New Source Review (NSR) construction permitting based on existing air quality and proposed facility emissions: Prevention of Significant Deterioration (PSD), Nonattainment NSR, and Minor Source NSR. In attainment areas, NSR ensures that new emissions do not degrade the air quality, which is achieved through the implementation of the PSD permitting program. In addition, NSR ensures that any large, new, or modified industrial source uses air pollution control technology. Projects for which pollutants are not subject to PSD or Nonattainment NSR may be subject to minor source NSR, which is the minor source permitting process for the state or local jurisdictional agency.

Based on the Project potential emission sources, only minor NSR permitting procedures would apply at each compressor station as the additional emissions result in total facility potential emissions of less than 250 tons per year (tpy) at each compressor station. PSD and nonattainment (Nonattainment NSR) permitting requirements are not applicable to the Project.

The federal air operating permit program for major sources was established by the EPA under 40 Code of Federal Regulations (CFR) 70, the federal Title V Operating Permit program. West Virginia has incorporated the provisions of this federal program in its Title V operating permit program under West Virginia Title 45, Code of State Rules (CSR), Series 30 (45 CSR 30). Virginia has incorporated the provisions of this federal program in its Title V operating permit program in Title 9, Chapter 80, Article 1 of the Virginia Administrative Code (VAC). The major source thresholds with respect to the West Virginia and Virginia Title V operating permit program regulations are 10 tpy of a single hazardous air pollutant (HAP), 25 tpy of any combination of HAP, and 100 tpy of all other regulated pollutants. The applicability of the Title V operating permit program to each compressor station is outlined below:

- Bradshaw Compressor Station – Currently a Title V major source and will continue to be a Title V major source after implementation of this Project.
- Harris Compressor Station – Currently a minor source and will trigger the need for a Title V operating permit after implementation of this Project.

³ The FERC Certificate authorization for the Mountain Valley Mainline includes 10 microturbines. Of these, 8 are currently installed on site, and Mountain Valley plans to install 5 additional units. This will result in a net increase of 3 microturbines. The existing fuel gas heater ratings have also been adjusted to the lower, as-built conditions. The existing turbine ratings have been adjusted to reflect as-built conditions.

- Stallworth Compressor Station – Currently a minor source and will trigger the need for a Title V operating permit after implementation of this Project.
- Swann Compressor Station – This Project’s potential emissions will be below the Title V permit thresholds; therefore, Title V permitting is not required.

The other provisions of the Clean Air Act (CAA) that would apply to the Project are discussed below.

D.2.1 New Source Performance Standards

The EPA promulgates New Source Performance Standards (NSPS) for new, modified, or reconstructed sources to control emissions to the level achievable by the best-demonstrated technology for stationary source types or categories. NSPS is designed to protect air quality when air pollutant emissions are increased, either through the modification of existing sources or through the construction of a new source of air pollution, as specified in the applicable provisions discussed in this section. NSPS may also establish fuel, monitoring, notification, reporting, and recordkeeping requirements.

West Virginia and Virginia have received delegation from the EPA to regulate facilities subject to most NSPS, which includes all standards that would apply to the Project. The applicable NSPS to the proposed operations at the Project include the following:

Subpart KKKKa, Standards of Performance for Stationary Combustion Turbines

40 CFR 60, Subpart KKKKa applies to stationary combustion turbine units with a heat input at a base load rating equal to or greater than 10 million British thermal units per hour, and which commenced construction, modification, or reconstruction after December 13, 2024. This rule establishes emission standards for nitrogen oxide (NO_x) and sulfur dioxide (SO₂) along with testing, monitoring, recordkeeping, and reporting requirements. The new Solar turbines proposed to be installed at the compressor stations would be equipped with lean pre-mix combustion technology to limit NO_x emissions below the applicable standard. The natural gas fuel used would contain sulfur below the applicable fuel sulfur limit.

Subpart OOOOb, Standards of Performance for Crude Oil and Natural Gas Facilities

40 CFR 60, Subpart OOOOb applies to specific equipment at natural gas facilities for which construction, modification or reconstruction commenced after December 6, 2022. This rule establishes emission standards and compliance schedules for the control of greenhouse gas (GHG) emissions. The Project would include facilities with requirements related to reciprocating compressors and fugitive equipment components; therefore, NSPS OOOOb requirements for reciprocating compressors and fugitive equipment components would apply to the Project.

D.2.2 National Emission Standards for Hazardous Air Pollutants

The 1990 CAA Amendments established a list of 189 HAPs, resulting in the promulgation of National Emission Standards for Hazardous Air Pollutants (NESHAPs). NESHAPs are set by the EPA and contained in 40 CFR 61 and 63. The NESHAPs establish

technology-based maximum achievable control technology (MACT) emission standards for specified source categories. Sources with potential emissions equal to or greater than 10 tpy of any single HAP or 25 tpy of total HAPs are considered major HAP sources. Sources with potential emissions less than the major source thresholds are area sources and may be subject to generally available control technology (GACT) requirements. Each compressor station included in the Project would be a minor source of HAPs.

The potential applicability of specific MACT or GACT standards to each compressor station was reviewed. The list of these standards and a summarized reason for their non-applicability is provided below.

- NESHAP Subpart HH – Natural Gas Production Facilities: Applies to production facilities but compressor stations are transmission facilities which are not subject to this standard.
- NESHAP Subpart HHH – Natural Gas Transmission and Storage Facilities: Applies to major sources of HAPs; however, the Project compressor stations would be area sources of HAPs which are not subject to this standard.
- NESHAP Subpart YYYY – Stationary Combustion Turbines: Applies to major sources of HAPs; however, the Project compressor stations would be area sources of HAPs which are not subject to this standard.
- NESHAP Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters: Applies to major sources of HAPs; however, the Project compressor stations would be area sources of HAPs which are not subject to this standard.
- NESHAP Subpart JJJJJ – Industrial, Commercial, and Institutional Boilers: Applies to area sources of HAPs; however, boilers at the Project compressor stations are defined as gas-fired which are exempted from this rule per 40 CFR 63.11195(e).

D.2.3 General Conformity Requirements

The EPA promulgated the General Conformity Rule to implement the conformity provision of Title I, section 176(c)(1) of the CAA. The General Conformity Rule was developed to ensure that federal actions in nonattainment and maintenance areas do not impede states' attainment of the NAAQS. The lead federal agency must conduct a conformity determination if a federal action's construction and operational activities are likely to result in generating direct and indirect emissions that would exceed the General Conformity Applicability threshold levels of the pollutant(s) for which an air basin is designated nonattainment or maintenance.

All of the proposed facilities for the Project are in areas designated as attainment with the NAAQS for all criteria pollutants. Therefore, the Project is not subject to General Conformity and does not require a General Conformity Determination.

D.2.4 Greenhouse Gas Reporting

The EPA has promulgated rules requiring tracking, reporting, and recordkeeping for GHGs beginning with calendar year 2010. The final mandatory reporting rule was published in the Federal Register (FR), Volume 74, No. 209, October 30, 2009, under 40 CFR 98. However,

on September 16, 2025, under 90 FR 44592, the EPA promulgated a proposed rule to remove GHG reporting program obligations for 46 source categories and certain natural gas distribution segments, in addition to suspending reporting requirements until 2034 for several other natural gas distribution segments which include onshore natural gas transmission compression. Additionally, on February 27, 2026, the EPA promulgated a final rule postponing GHG reporting for 2025 under 40 CFR 98 until October 30, 2026. It is anticipated this reporting delay deadline may be preceded by finalizing the rule to remove many GHG reporting requirements. Lastly, on February 12, 2026, under 91 FR 7586, the EPA rescinded the 2009 GHG Endangerment Finding and all subsequent GHG emission standards for all vehicles and engines of model years 2012 to 2027 and beyond. Currently, owners or operators of a compressor station must report their GHG emissions if total emissions from Subpart C (stationary fuel combustion) and all applicable subparts (Subpart W – Petroleum and Natural Gas Systems) are more than 25,000 metric tpy of CO₂e on an annual basis. However, further GHG regulatory actions in 2026 may remove these requirements, at least temporarily.

The Project would include facilities where GHG emissions are greater than 25,000 metric tpy of carbon dioxide equivalent (CO₂e); therefore, Mountain Valley would monitor actual emissions and would comply with the GHG reporting requirements if they remain or become applicable.

D.3. State Regulations

Air construction permits would be required from the West Virginia Department of Environmental Protection (WVDEP) for the additional emissions sources at the Bradshaw CS and Harris CS, and for the additional and replacement emissions sources at the Stallworth CS. An air construction permit would be required from the Virginia Department of Environmental Quality (VDEQ) for the proposed sources at the Swann CS. These facilities would be considered “minor sources” under the NSR permitting program as the potential to emit of each of these modified and new compressor stations is below the PSD “major source threshold” of 250 tpy. As indicated previously, Bradshaw CS would modify its existing Title V operating permit with WVDEP. Harris CS and Stallworth CS would obtain an initial Title V operating permit through WVDEP after starting operations, and Swann CS would not require a Title V permit.

The existing compressor stations (Bradshaw, Harris, and Stallworth CSs) and their proposed modifications are subject to regulations contained in the West Virginia CSR Title 45. The WVDEP air construction permit applications and permitting processes for the modifications will identify all applicable CAA and WVDEP regulations, with which Mountain Valley will comply with and pay the necessary fees. WVDEP applicable regulations, other than permit regulations, generally include the following requirements/limitations within 45 CSR 1, 45 CFR 2, 45 CSR 4, and 45 CSR 17:

- 10 percent opacity limit for the proposed heaters.
- Prohibition against causing an objectionable odor from the Project.
- Limiting fugitive particulate emissions from the Project to no farther than the property boundary.
- Alternative particulate emissions limitations during startup and shutdown.

The 56,590 hp combustion turbine at the Harris CS, with a heat input rating of 354 MMBtu/hr, would also be subject to 45 CSR 40. This rule has NO_x ozone season limitations and associated monitoring, recordkeeping and reporting requirements for combustion turbines greater than 250 MMBtu/hr heat input. Mountain Valley would install and operate emissions sources to meet all of these and the above WVDEP requirements.

The proposed Swann CS would be subject to regulations contained in Title 9, VAC, Agency 5 (9VAC5) which includes air permitting requirements among other requirements. The Swann CS would be subject to Article 6 permitting for new stationary sources under 9VAC5-80, Part II. The Virginia Department of Environmental Quality (VDEQ) air permit application and permitting process will identify all applicable CAA and VDEQ regulations, which Mountain Valley will comply with and pay the necessary fees. VDEQ applicable regulations, other than permit regulations, generally include the following requirements/limitations within 9VAC5-50 and 9VAC5-130:

- Maintaining and operating equipment, including air pollution control equipment, in a manner to minimize emissions including during startup, shutdown, and malfunctions.
- 20 percent opacity limit except for one 6-minute period per hour not to exceed 30 percent opacity.
- Work practice requirements for prevention of fugitive dust emissions.
- Prohibition against causing objectionable odors from the Project beyond the facility border.
- Determining if state-level Best Available Control Technology (BACT) is achieved for emissions of particulate matter (PM), particulate matter with an aerodynamic diameter less than or equal to 10 micrometers (PM₁₀), particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers (PM_{2.5}), NO_x, volatile organic compounds (VOC), and carbon monoxide (CO), which will be addressed during the permitting process.
- Open burning is allowed for destruction of clean-burning waste and debris from the development or modification of roads and highways, pipelines, buildings, or any other clearing operations; however, no open burning is allowed from May 1 to September 30.

The 56,834 hp combustion turbine at the Swann CS, with a heat input rating of 356 MMBtu/hr would also be subject to 9VAC5-140 regarding Virginia's NO_x Budget Program for Non-electric Generating Units. This rule has NO_x budget program requirements for combustion turbines greater than 250 MMBtu/hr heat input. Mountain Valley would install and operate emissions sources to meet these and all the above VDEQ requirements.

D.4. References

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APPENDIX E
ALTERNATIVES TABLES AND FIGURES

APPENDIX E

ALTERNATIVES TABLES AND FIGURES

Tables

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Table E1								
Environmental Resources Affected by Electric Motor-Driven Compression Alternatives								
Feature	Bradshaw Electric Alternative	Bradshaw Proposed	Harris Electric Alternative	Harris Proposed	Stallworth Electric Alternative	Stallworth Proposed	Swann Electric Alternative	Swann Proposed
High-voltage electric transmission line approximate length (miles)	2.5	0.0	3.4	0.0	6.9	0.0	2.5	0.0
Electric power service footprint (acres) ^a	33.1	0.0	43.0	0.0	82.1	0.0	34	0.0
Compressor station footprint (acres) ^b	6.3	6.3	5.6	5.6	6.4	6.4	25.4	25.4
Total combined power service and station footprint (acres)	39.4	6.3	48.6	5.6	88.5	6.4	59.4	25.4
Land use affected	Forested, developed	Developed	Forested, developed	Developed	Forested, developed	Developed, open	Forest, scrub, open	Forest, scrub, open
Forested land affected (acres)	28.8	0	33.4	0	57.8	0	36.9	13.8
Wetlands (NWI) crossed (acres) ^c	0	0	0.1	0	0.1	0	0.3	0
Waterbodies (NHD) crossed (number) ^d	0	0	0	0	1	0	0	0
Source: Mountain Valley February 13, 2026 response to EIR 1 question 2 under Resource Report 10, table 10-2c, FERC Accession No. 20260213-5147.								
a Footprint of electric motor driven alternatives is based on estimated length of high-voltage (> 34.5 kV) electric transmission line service with an assumed 100-foot-wide right-of-way and associated electric substation.								
b The footprint for an electric motor driven alternative would be the same as the proposed natural gas driven compression at each station.								
c NWI = U.S. Fish and Wildlife Service National Wetland Inventory.								
d NHD = U.S. Geological Survey National Hydrography Dataset.								

Table E2						
Comparison of Emissions from Existing Compressor Stations Electric Motor-Driven Alternative						
Pollutant	Compressor Driver Total HP at Site Conditions	Compressor Driver Power Input Required (MW)	Annual Compressor Driver Power Input Required (MWh)	Annual Compressor Driver Emissions Using Grid Power (tons)	Potential to Emit Annual Emissions for Natural Gas Turbines (tons)	Emissions Increase Using Grid Power
Bradshaw Compressor Station						
CO ₂	23,483	22.9	200,602	136,575	91,061	50%
SO ₂				57	2.6	2,074%
NO _x				50	25.9	94%
PM _{2.5}				8	7.7	9%
Harris Compressor Station						
CO ₂	56,590	55.2	483,416	329,213	197,001	67%
SO ₂				138	5.7	2,330%
NO _x				122	56.1	117%
PM _{2.5}				20	16.7	22%
Stallworth Compressor Station						
CO ₂	44,748	43.6	382,257	260,276	173,620	50%
SO ₂				109	5.0	2,075%
NO _x				96	49.4	94%
PM _{2.5}				16	14.8	9%
Sources: EPA, 2025; Mountain Valley February 13, 2026 response to EIR 1 question 2 under Resource Report 10, tables 10-2b-1, 10-2b-2, and 10-2b-3, FERC Accession No. 20260213-5147.						
lbs = pounds, MW = megawatt, MWh = megawatt-hours, HP=horsepower.						

Table E3							
Comparison of Emissions from Swann Compressor Station Electric Motor-Driven Alternative							
Pollutant	RFC West Emission Rate (lbs/MWh)	Compressor Driver Total HP at Site Conditions	Compressor Driver Power Input Required (MW)	Annual Compressor Driver Power Input Required (MWh)	Annual Compressor Driver Emissions Using Grid Power (tons)	Potential to Emit Annual Emissions for Natural Gas Turbines (tons) ^a	Emissions Increase Using Grid Power
CO ₂	911.4	142,851	139.3	1,220,295	556,088	508,592	9%
SO ₂	0.412				251	14.7	1,610%
NO _x	0.422				257	47.8	438%
PM _{2.5} ^b	0.0708				43	43.2	-0.03%
Sources: EPA, 2025; Mountain Valley February 13, 2026 response to EIR 1 question 2 under Resource Report 10, Attachment 10-2-a, revised table 10.5-1, FERC Accession No. 20260213-5147.							
lbs = pounds, MW = megawatt, MWh = megawatt-hours, HP=horsepower.							
a Emission estimates provided are for the turbines only for comparison purposes and do not include other equipment at the site.							
b Grid emissions factor is taken from the EPA (2023) draft white paper "Particulate Matter Emissions for eGRID2021."							

Figure E1. Swann Compressor Station Proposed Site

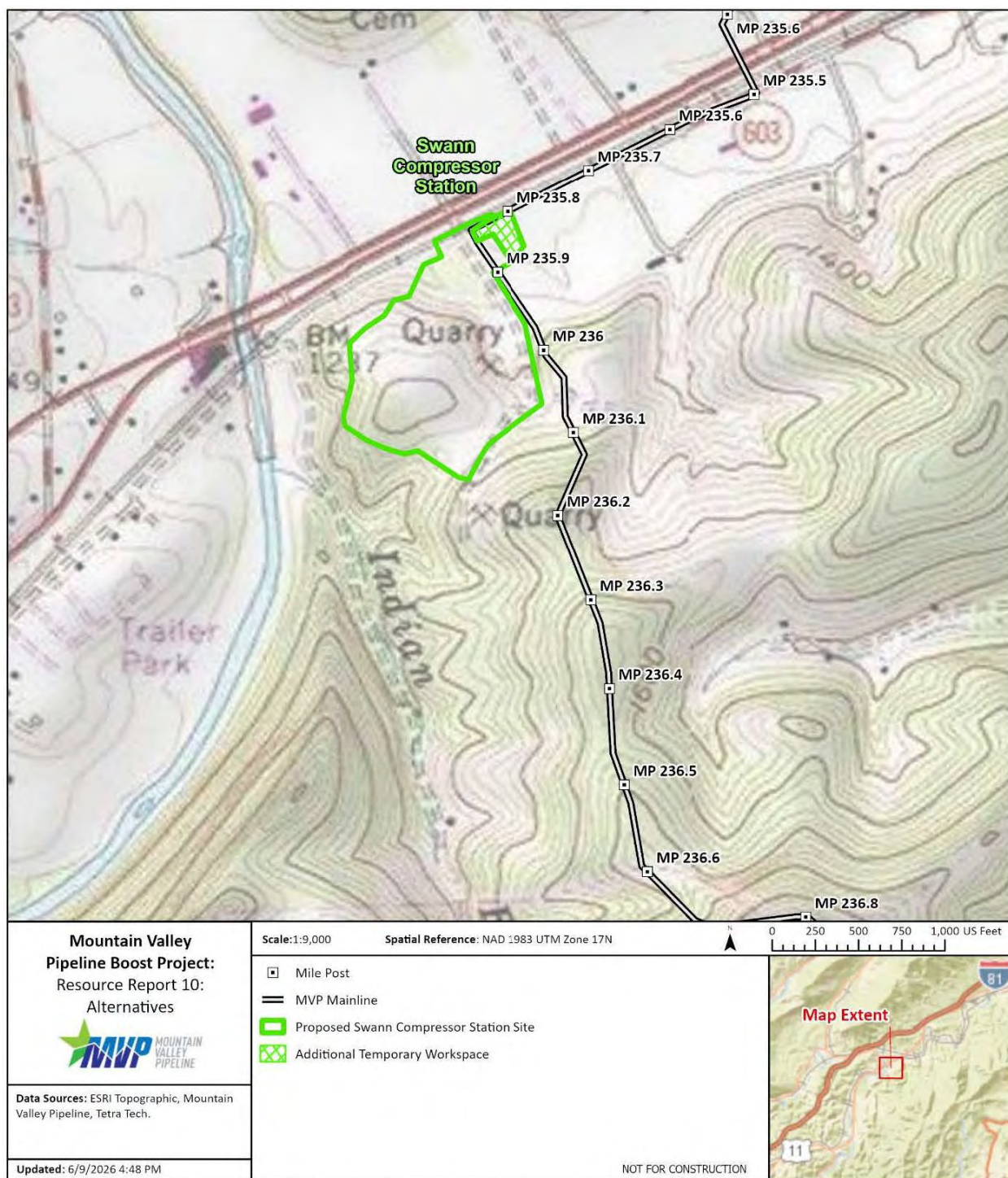


Figure E2. Swann Compressor Station Site Alternatives Overview

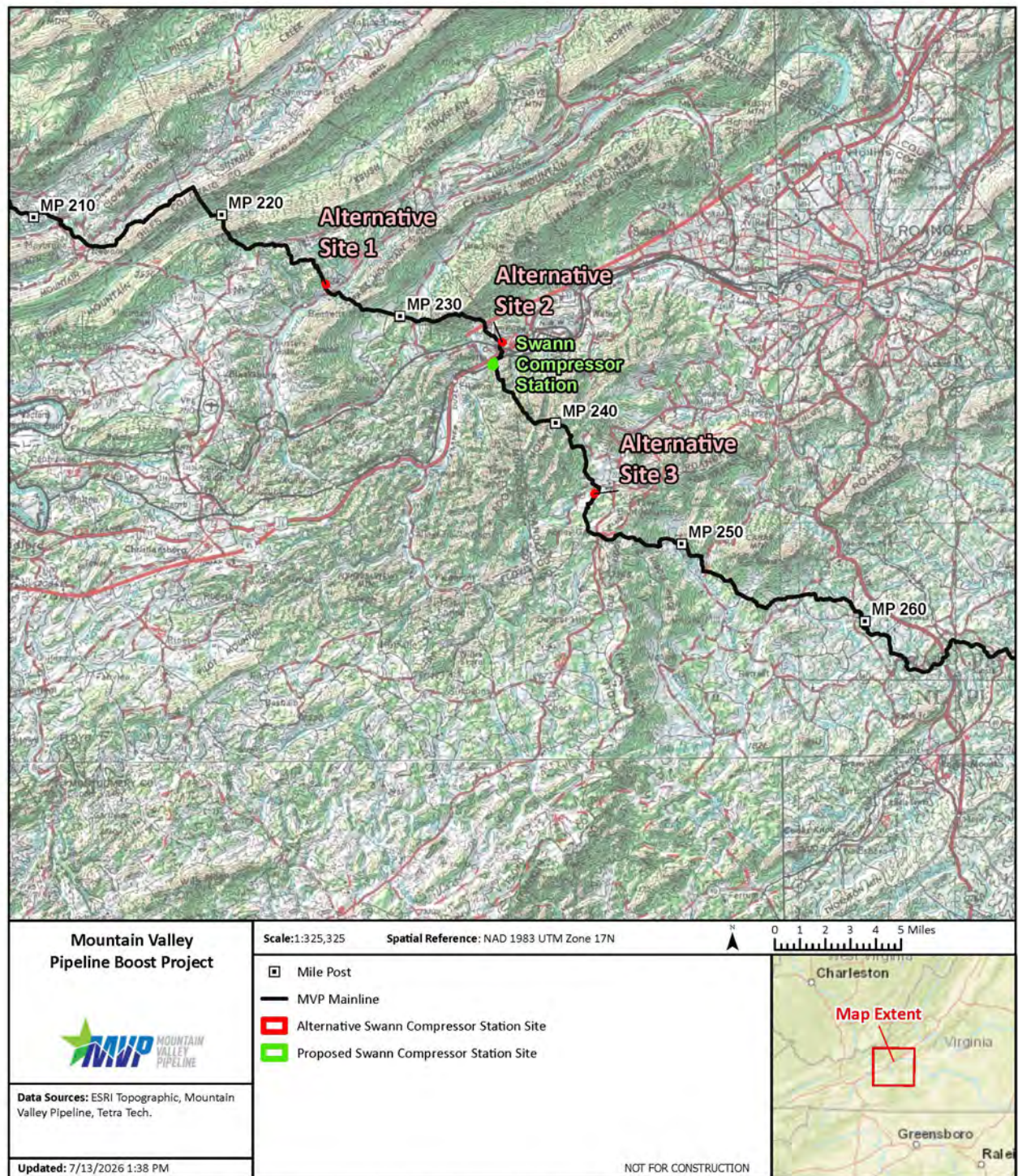


Figure E3. Swann Compressor Station Site Alternative 1

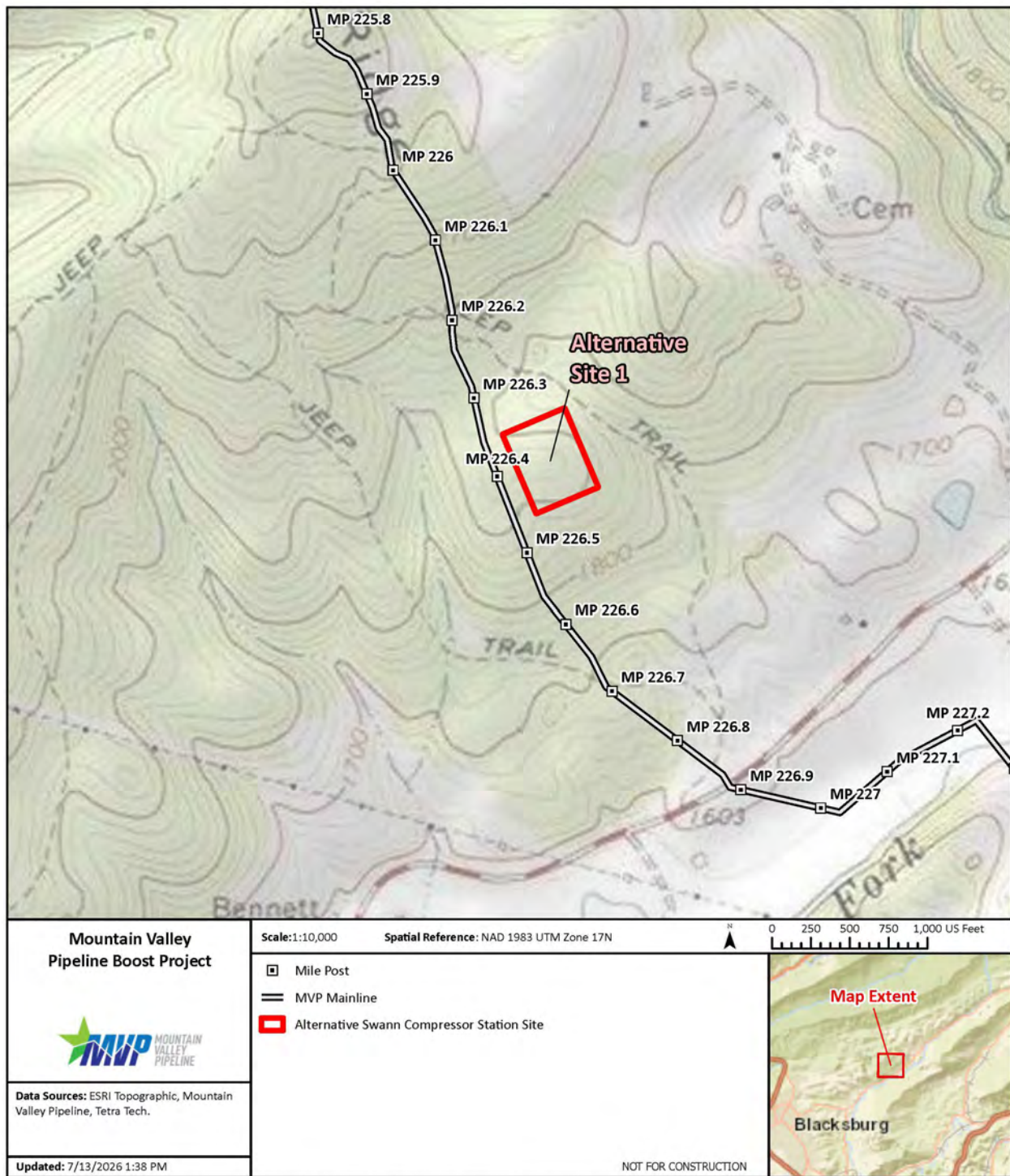


Figure E4. Swann Compressor Station Site Alternative 2



Figure E5. Swann Compressor Station Site Alternative 3



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APPENDIX F
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APPENDIX F

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HDR, Inc. is a third-party contractor assisting the Commission staff in reviewing the environmental aspects of the project application and preparing the environmental documents required by NEPA. Third-party contractors are selected by Commission staff and funded by project applicants. Third-party contractors execute a disclosure statement specifying whether any financial or other interests in the outcome of the project exist. In accordance with Commission policies, these statements are reviewed to ensure no prohibited financial or other organizational conflicts of interest exist. Third-party contractors are required to self-report any changes in financial situation and to refresh their disclosure statements annually. The Commission staff solely directs the scope, content, quality, and schedule of the contractor's work. The Commission staff independently evaluates the results of the third-party contractor's work and the Commission, through its staff, bears ultimate responsibility for full compliance with the requirements of NEPA.

APPENDIX G

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